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## LETTER OF TRANSMITTAL

TO: HCDEH  
100 H St., Suite 100  
Eureka, CA 95501

DATE: July 18, 2006  
JOB NO.: 3888.02  
PROJECT: Blue Lake Market

ATTN: Mark Verhey, C.E.G.

TRANSMITTED BY:  Mail  Delivered In Person  Fax

No. Copies	Description
1	Subsurface Investigation Status Report and Response to HCDEH Correspondence
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REMARKS:

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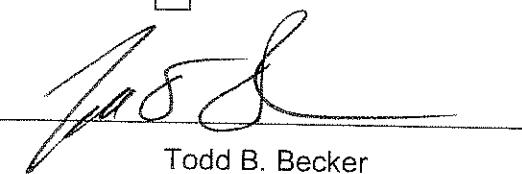
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THIS MATERIAL SENT FOR:  As Requested  Information  
 Approval

cc: Pat Folkins

By:



Todd B. Becker

# SUBSURFACE INVESTIGATION STATUS REPORT AND RESPONSE TO HCDEH CORRESPONDENCE

Blue Lake Market  
410 Railroad Avenue  
Blue Lake, California

LOP No. 12229

Prepared for:  
Mr. Patrick Folkins  
2020 Ardagh Court  
Eureka, CA 95503



Todd B. Becker, Staff Geologist

  
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July 18, 2006

LACO Project No. 3888.02

# **SUBSURFACE INVESTIGATION STATUS REPORT AND RESPONSE TO HCDEH CORRESPONDENCE**

Report of Findings: Boring and Monitoring Well Installation

Response to HCDEH Comments dated December 22, 2005

Blue Lake Market, 410 Railroad Avenue, Blue Lake, California

LOP No. 12229, USTCF Claim No. 11658, LACO Project No. 3888.02

## **EXECUTIVE SUMMARY**

Fieldwork to delineate impacts of gasoline-range material to soil and groundwater related to the former underground storage tank (UST) at the Blue Lake Market, located at the above address, was conducted in March 2006 by LACO ASSOCIATES (LACO). The work activities were performed in general accordance with LACO's *Proposed Boring and Monitoring Well Installation* letter dated January 17, 2006. The current owner and responsible party for cleanup is Mr. Patrick Folkins. During the current investigation, LACO installed two borings and one monitoring well for the collection of soil and groundwater samples. A location map is presented as Figure 1 and a site map is presented as Figure 2.

Borings B15 and B16 were installed to delineate the north to northeastern extents of gasoline-range material impacts to soil near the former pump islands at the Blue Lake Market site. Monitoring well MW6 was installed to delineate the downgradient extents of the dissolved-phase gasoline-range material impacts. Analytical results from soil in the monitoring well MW6 boring identified the farthest downgradient detection of gasoline-range material impacts to soil; however, initial groundwater sampling in this well was reported below standard laboratory detection limits for all analytes tested.

## **INTRODUCTION**

LACO installed two borings (B15 and B16) and one monitoring well (MW6) at the subject property on March 28, 2006, in an effort to delineate the limits of sorbed and dissolved-phase gasoline-range material impacts. This report contains the details of the boring installation, sampling and drilling methodologies, summary of soil and groundwater laboratory results, conclusions, and recommendations for future work at the site.

## **SITE CHRONOLOGY**

- **1990:** One 550-gallon UST was removed from the site.
- **December 1994:** Three monitoring wells (MW1 through MW3) and five temporary

- borings (B1 through B5) were installed.
- **1994 to present:** Groundwater monitoring was conducted.
  - **July 2001:** Five temporary soil borings (B6 through B10) were installed.
  - **September 2005:** Four temporary borings (B11 through B14) and two monitoring wells (MW4 and MW5) were installed.
  - **March 2006:** Two temporary borings (B15 and B16) and one monitoring well (MW6) were installed.

## FIELD METHODS

### Temporary Boring Installation

Borings B15 and B16 were installed using direct push technology. Continuous cores were collected using macrocore rods with an outside diameter (OD) of 2.125 inches, fitted with plastic sample liners to facilitate the collection of soil samples. Soil samples were collected from the macrocore plastic liners and placed directly into brass tubes, sealed with Teflon, and capped. Soil lithology was logged in general accordance with ASTM-D2488 noting changes in texture, the presence of gasoline-range material, and the presence and depth of groundwater. Grab groundwater samples were collected using a screen point sampler with disposable PVC tubing equipped with a check valve, and were decanted directly into laboratory-supplied containers. The screen point sampler was exposed to the aquifer for collection of grab groundwater samples from approximately the 12 to 16 feet below ground surface (bgs) sampling interval. Boring location, installation method, total depth of exploration, sample depths, sample analytical suite, and method of boring closure are summarized in Table A, below. The locations of current and historical borings are presented in Figure 2. A key to abbreviations is included as Attachment 1. Boring logs from the current investigation are included in Attachment 2.

**Table A: Boring Installation Details**

Boring ID	Location	Installation Method	Total Depth (feet bgs)	Soil Sample Depths (feet bgs)	Groundwater Sample	Sample Analytical Suite - soil and groundwater	Closure Method
B15	NW of Market	Direct Push; 2.125 Inch Macrocore	16	4.25, 8.0, 10.5, 13.0, 16.0	Grab	TPHg, BTEX, MTBE	Bentonite to 0.5 feet bgs, asphalt to grade
B16			16	4.0, 8.0, 12.0, 16.0	Grab		
MW6	40 Feet South of Monitoring Well MW4	Direct Push; 3.25 Inch Dual Tube	15	8, 15	---		Monitoring Well Constructed

Soil cuttings and rinse water were stored on-site in steel, 55-gallon, DOT-approved drums pending characterization and disposal. All drilling and sampling equipment was decontaminated before and after each use with Alconox soap and clean water rinse. Borings B15 and B16 were closed using hydrated bentonite and cold-patch asphalt to match existing grade.

### **Monitoring Well Installation**

Monitoring well MW6 was installed using a direct push drill rig fitted with dual tube 3.25-inch OD rods. Prior to the installation of monitoring well MW6, continuous cores were collected to 15 feet bgs using dual tube rods with an OD of 3.25 inches, fitted with plastic sample liners to collect soil samples and characterize lithology to identify the depth range for the screen interval. Monitoring well location, total depth, screened interval, and annular materials used in the construction of monitoring well MW6 are presented in Table B, below. The monitoring well was completed with a locking well cap and flush-mount access box with a locking, watertight lid, set in an apron of traffic-rated concrete extending at least 6 inches from the access box. The log for monitoring well MW6 is included in Attachment 2.

Table B: Monitoring Well Construction Details					
Well ID	Well Location	Total Well Depth (feet)	0.010-Slot Well Screen Interval (feet)	#2/16 Sand Interval (feet)	Cement Slurry Seal Interval (feet)
MW6	40 Feet South of Monitoring Well MW4	15	10 - 15	9 - 15	1.5 - 9

Rinse water was stored on-site in 55-gallon, DOT-approved, steel drums pending characterization and disposal. All drilling and sampling equipment was decontaminated before and after each use with Alconox soap and clean water rinse.

### **Monitoring Well Development**

On April 3, 2006, a LACO field technician developed monitoring well MW6. The monitoring well was initially surged with a solid block for five minutes, then with a check ball for eight to ten minutes. Water was purged from the monitoring well using a down-hole pump until the discharge was measured to be less than 10 nephelometric turbidity units (NTU) using a turbidity meter. All down-hole equipment was decontaminated prior to and after its use with Alconox soap and clean water rinse. Water extracted during the development of the monitoring well was

stored on-site in steel, 55-gallon, DOT-approved, steel drums pending characterization and disposal. Field notes generated during well development are included as Attachment 3.

### **Initial Sampling**

Monitoring well MW6 was initially sampled on April 4, 2006. Field forms from the April 4, 2006, sampling event are included as Attachment 3. Results from the April 4, 2006, sampling event were non-detect for contaminants of concern (COCs) and were also reported in LACO's Groundwater Monitoring Report, First Quarter 2006 (LACO May 2006).

## **RESULTS OF INVESTIGATION**

### **Soil and Groundwater Analytical Results**

Historical laboratory analytical results for soil and groundwater samples collected from site borings and monitoring wells are summarized in Tables 1 and 2, respectively, and a copy of the analytical report is included as Attachment 4. Historical laboratory results from monitoring wells, which includes the initial groundwater results for monitoring well MW6, are presented in Table 3. Laboratory analytical results for soil samples collected from borings B15 and B16 and monitoring well MW6, and groundwater samples collected from borings B15 and B16 are presented below in Tables C and D, respectively. Recent concentrations of total petroleum hydrocarbons as gasoline (TPHg) detected in groundwater from monitoring wells MW1 through MW6, borings B15 and B16, and SHN monitoring wells MW101 through MW106 are presented on Figure 3.

**Table C: Soil Laboratory Analytical Results for March 28, 2006**

Sample Identification	Sample Depth (feet bgs)	TPHg ( $\mu\text{g/g}$ )	Benzene ( $\mu\text{g/g}$ )	Toluene ( $\mu\text{g/g}$ )	Ethylbenzene ( $\mu\text{g/g}$ )	Total Xylenes ( $\mu\text{g/g}$ )	MTBE ( $\mu\text{g/g}$ )
3888-B15-4.25	4.25	ND<1.0	ND<0.0050	<b>0.0056</b>	ND<0.0050	ND<0.0050	ND<0.050
3888-B15-8.0	8.0	ND<1.0	ND<0.0050	<b>0.0054</b>	ND<0.0050	ND<0.0050	ND<0.050
3888-B15-10.5	10.5	<b>4.6</b>	ND<0.0050	ND<0.040	ND<0.040	ND<0.040	ND<0.050
3888-B15-13.0	13.0	<b>1.3</b>	ND<0.0050	ND<0.010	ND<0.0050	<b>0.0069</b>	ND<0.050
3888-B15-16.0	16.0	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
3888-B16-4.0	4.0	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
3888-B16-8.0	8.0	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050
3888-B16-12.0	12.0	<b>15</b>	ND<0.030	ND<0.20	<b>0.049</b>	<b>0.14</b>	<b>0.051</b>
3888-B16-16.0	16.0	<b>1.3</b>	ND<0.0050	ND<0.040	<b>0.0056</b>	<b>0.014</b>	ND<0.050
3888-MW6-8.0	8.0	ND<1.0	ND<0.0050	<b>0.0071</b>	ND<0.0050	ND<0.0050	ND<0.050
3888-MW6-15.0	15.0	<b>54</b>	ND<0.0050	ND<1.0	ND<0.30	ND<0.60	ND<0.050

Table D: Groundwater Laboratory Analytical Results for March 28, 2006						
Sample Identification	TPHg ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )
3888-B15-GW	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
<b>3888-B16-GW</b>	<b>1,900</b>	ND<5.0	ND<40	ND<10	ND<6.0	ND<10

## CONCLUSIONS

- Borings B15 and B16 delineate the upgradient, north to northeastern extent of the TPHg soil plume associated with this site. The soil results for borings B15 and B16 are two to three orders of magnitude less than results reported for monitoring well MW2 and boring B13, near the core of the TPHg soil plume.

## RECOMMENDATIONS

- LACO recommends the preparation of a limited Feasibility Study (FS) and Corrective Action Plan (CAP) to evaluate remedial options and determine appropriate and effective remediation techniques. The FS and CAP will also include an updated site conceptual model.

## COMMENTS TO HCDEH CORRESPONDENCE

Responses to the HCDEH's comments in the December 22, 2005, correspondence regarding LACO's November 28, 2005, *Report of Findings: Boring and Monitoring Well Installation* follow with the HCDEH's comments in italics followed by LACO's responses.

- *We appreciate use of question marks on figures where there is not a level of certainty. We understand B13 recently recorded 3,000 ppm TPHg. This area of soil contamination is not delineated. Figure 4 shows TPHg concentrations in soil change from 3000 ppm to non-detect over a distance of less than five feet. We do not concur with the interpretation. We understand you recommend submitting a workplan because the extent of soil contamination in this vicinity is unknown. If it is unknown, in this area, use of question marks is appropriate on the figure.*

Based on analytical data for soil available at the time of production of Figure 4 (Attachment 5), the use of question marks on the 100 parts per million (ppm) isocontour would have been appropriate for most of the northern to southeastern edge of the soil plume. Due to recent boring analytical results from B15 and B16 (Figure 2), the results for TPHg in soil suggest that the upgradient section, the northeastern extent, of the soil plume from the Blue Lake Market site is delineated and soil concentrations decrease by

three orders of magnitude in approximately 12 feet from monitoring well MW2 to boring B15, and by two orders of magnitude in approximately 20 feet from boring B13 to B16. However, the east-northeastern to east-southeastern limits of the soil plume in the area of the site building is not delineated and should be represented with question marks based on LACO's interpretation of the plume limits. The recommended CAP will include updated figures with a TPHg in soil isocontour map and areas where there is not a level of certainty will be indicated with question marks.

- *Figure 6 shows an interpretation of the groundwater plumes for the Blue Lake Belt and Leather (BLBL) site and the Blue Lake Market site. There is a level of certainty suggested at the northern edge of the plume, due to an absence of question marks. The data used to support this interpretation is not clear. An alternative interpretation is there are two separate groundwater plumes associated with the different sources.*

The projection of the northern edge of the plume on Figure 6 (Attachment 6) was an interpretation, extrapolated from available data, and as such should have been presented with question marks to indicate the uncertainty in the projection. With the recent data from monitoring well MW6, the downgradient edge of the plume is now delineated. The recommended CAP will include updated figures with a "TPHg in groundwater isocontour map" and areas where there is not a level of certainty will be indicated with question marks. A discussion and interpretation regarding the existence of two different plumes associated with the two different sources, Blue Lake Market and Blue Lake Belt and Leather sites, will be addressed in the CAP.

- *The groundwater gradient map (Figure 10) does not include data from Monitoring Well Two (MW2) and Monitoring Well One (MW1). Please include all current data on gradient maps. How does this alter your interpretation?*

The gradient illustrated in Figure 10 (Attachment 7) was calculated using monitoring well MW3 and SHN monitoring wells MW102 through MW106 while excluding monitoring wells MW1 and MW2 to illustrate a hydraulic gradient that represents the distribution of dissolved-phase TPHg as interpreted from historical site data. The interpretation presented in that report indicated that, based on the distribution of gasoline-range material impacts to groundwater across the site, the hydraulic gradient appears to be to the south-southwest. Included in Attachment 7 is Figure 3 from *Groundwater Monitoring Report; Third Quarter 2005* which includes the hydraulic gradient data used in Figure 10; however, all monitoring wells are included in the contours, and monitoring wells MW1,

MW2, and MW3 were used to calculate hydraulic gradient. The CAP will address hydraulic gradient and transport of contaminants from and across the site. Since the generation of Figure 10, data has been collected from monitoring wells MW4 through MW6 to aid in the hydrogeologic interpretation.

## LIMITATIONS

LACO has exercised a standard of care equal to that generated for this industry to ensure that the information contained in this report is current and accurate. LACO disclaims any and all liability for any errors, omissions, or inaccuracies in the information and data presented in this report and/or any consequences arising therefrom, whether attributable to inadvertence or otherwise. LACO makes no representations or warranties of any kind including, but not limited to, any implied warranties with respect to the accuracy or interpretations of the data furnished. LACO assumes no responsibility of any third party reliance on the data presented, and that data generated for this report represents information gathered at that time and at the locations indicated. It should not be utilized by any third party to represent data for any other time or location. It is known that site and subsurface environmental conditions can change with time and under anthropologic influences. This report is valid solely for the purpose, site, and project described in this document. Any alteration, unauthorized distribution, or deviation from this description will invalidate this report.

## LIST OF FIGURES, TABLES, AND ATTACHMENTS

Figure 1: Location Map

Figure 2: Site Map

Figure 3: Current TPHg in Groundwater, Borings and Monitoring Wells

Table 1: Historical Soil Analytical Results

Table 2: Historical Analytical Results for Groundwater- Borings

Table 3: Monitoring Well Data and Groundwater Analytical Results

Attachment 1: Key to Abbreviations

Attachment 2: Boring and Monitoring Well Logs

Attachment 3: Well Development Field Notes and Initial Sampling Field Forms for Monitoring Well MW6

Attachment 4: Laboratory Analytical Report

Attachment 5: Figure 4 from *Report of Findings: Boring and Monitoring Well Installation; November 28, 2006*

Attachment 6: Figure 6 from *Report of Findings: Boring and Monitoring Well Installation; November 28, 2006*

Attachment 7: Figure 10 from *Report of Findings: Boring and Monitoring Well Installation; November 28, 2006* and Figure 3 from *Groundwater Monitoring Report; Third Quarter 2005* dated October 13, 2005

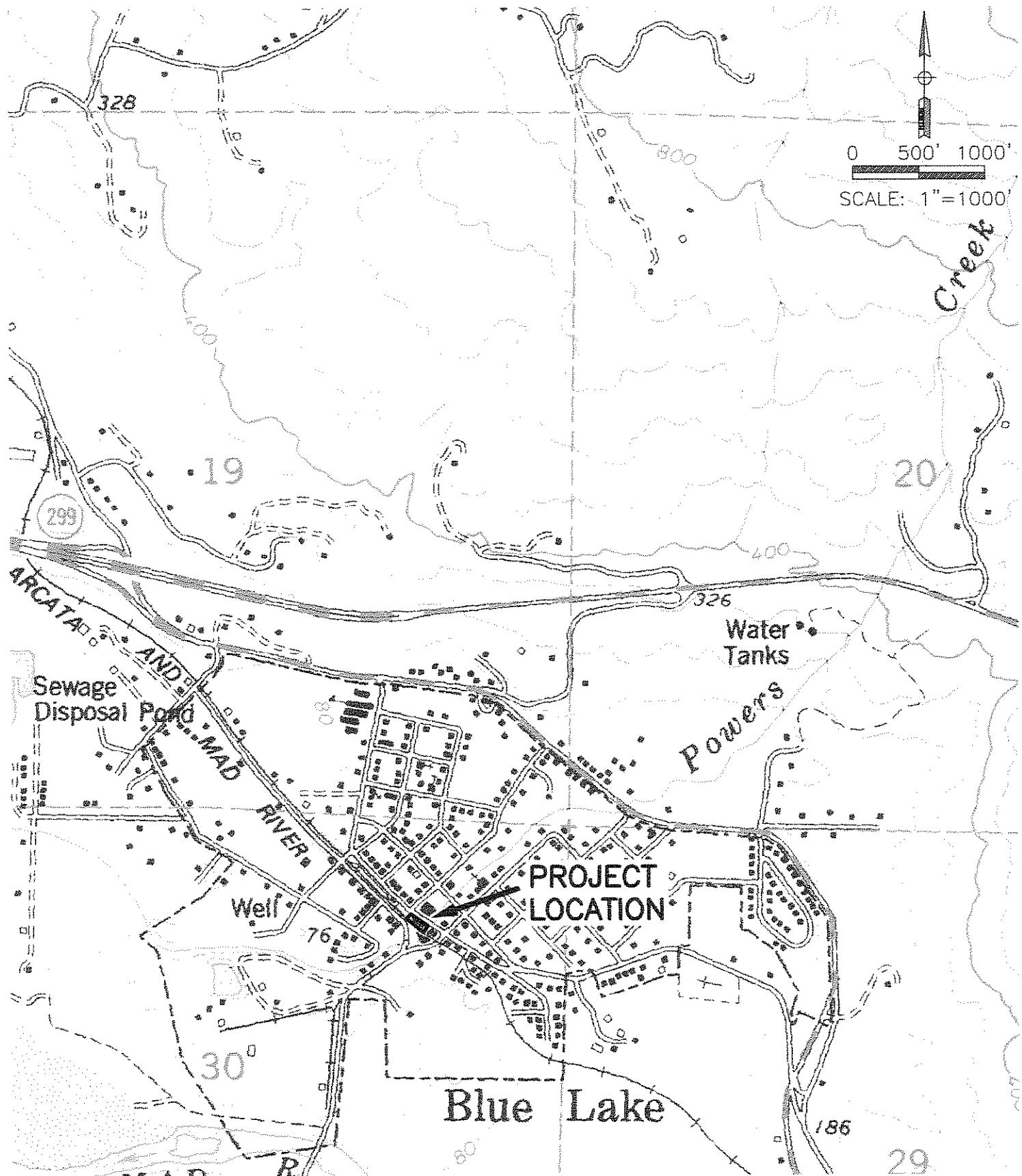
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PROJECT	REPORT OF FINDINGS	BY	RJM	FIGURE
CLIENT	PAT FOLKINS	DATE	6/08/06	1
LOCATION	BLUE LAKE MARKET	CHECK	200	JOB NO.
	LOCATION MAP	SCALE	1"=1000'	3888.02

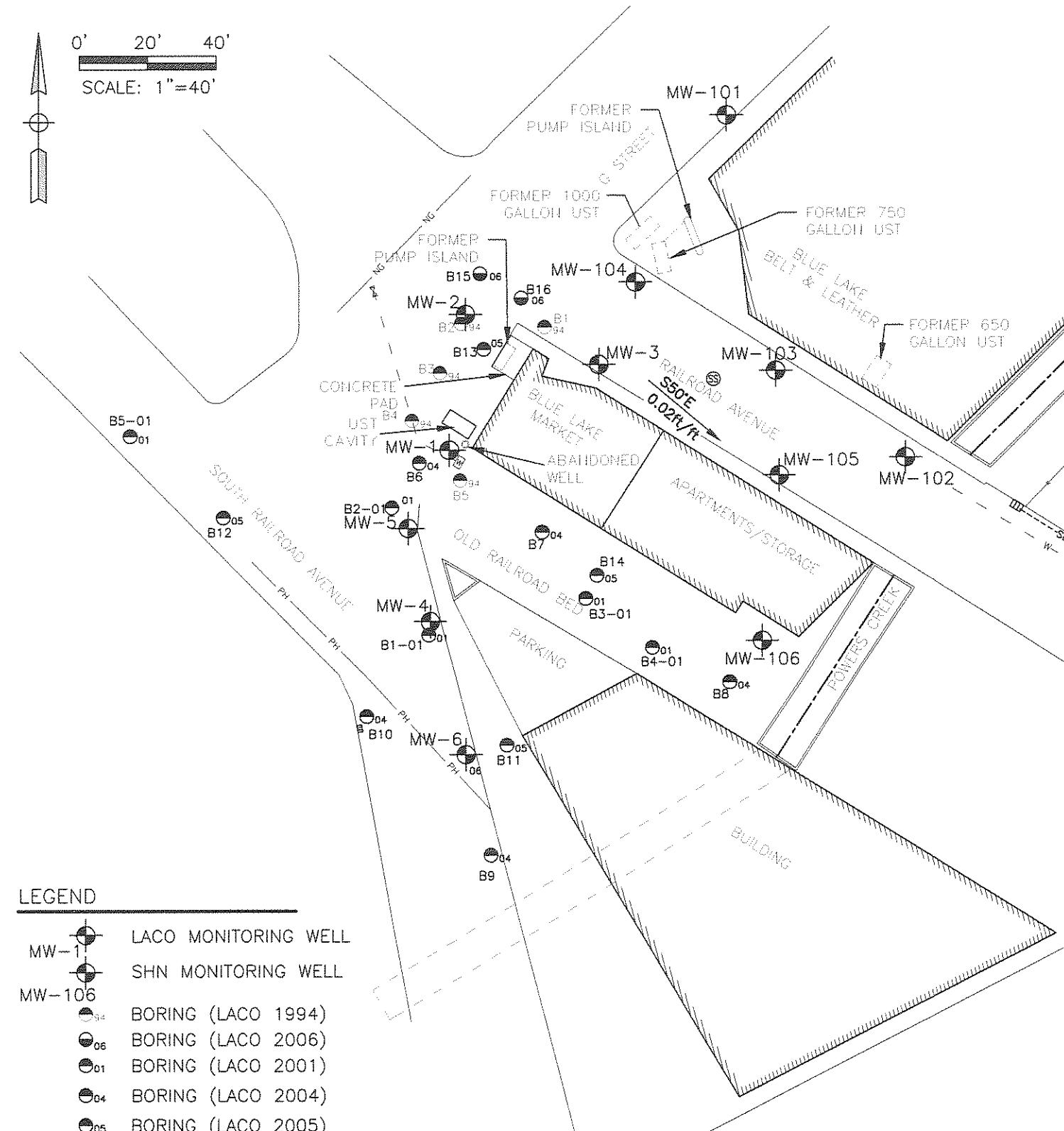




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PROJECT	REPORT OF FINDINGS	BY	RJM	FIGURE
CLIENT	PAT FOLKINS	DATE	6/19/06	2
LOCATION	BLUE LAKE MARKET	CHECK	<i>ZP</i>	JOB NO.
SITE MAP		SCALE	1"=40'	3888.02



## LEGEND

- |        |                      |
|--------|----------------------|
| MW-1   | LACO MONITORING WELL |
| MW-106 | SHN MONITORING WELL  |
| ④      | BORING (LACO 1994)   |
| ⑥      | BORING (LACO 2006)   |
| ①      | BORING (LACO 2001)   |
| ④      | BORING (LACO 2004)   |
| ⑤      | BORING (LACO 2005)   |

S50°E  
0.02 ft/ft

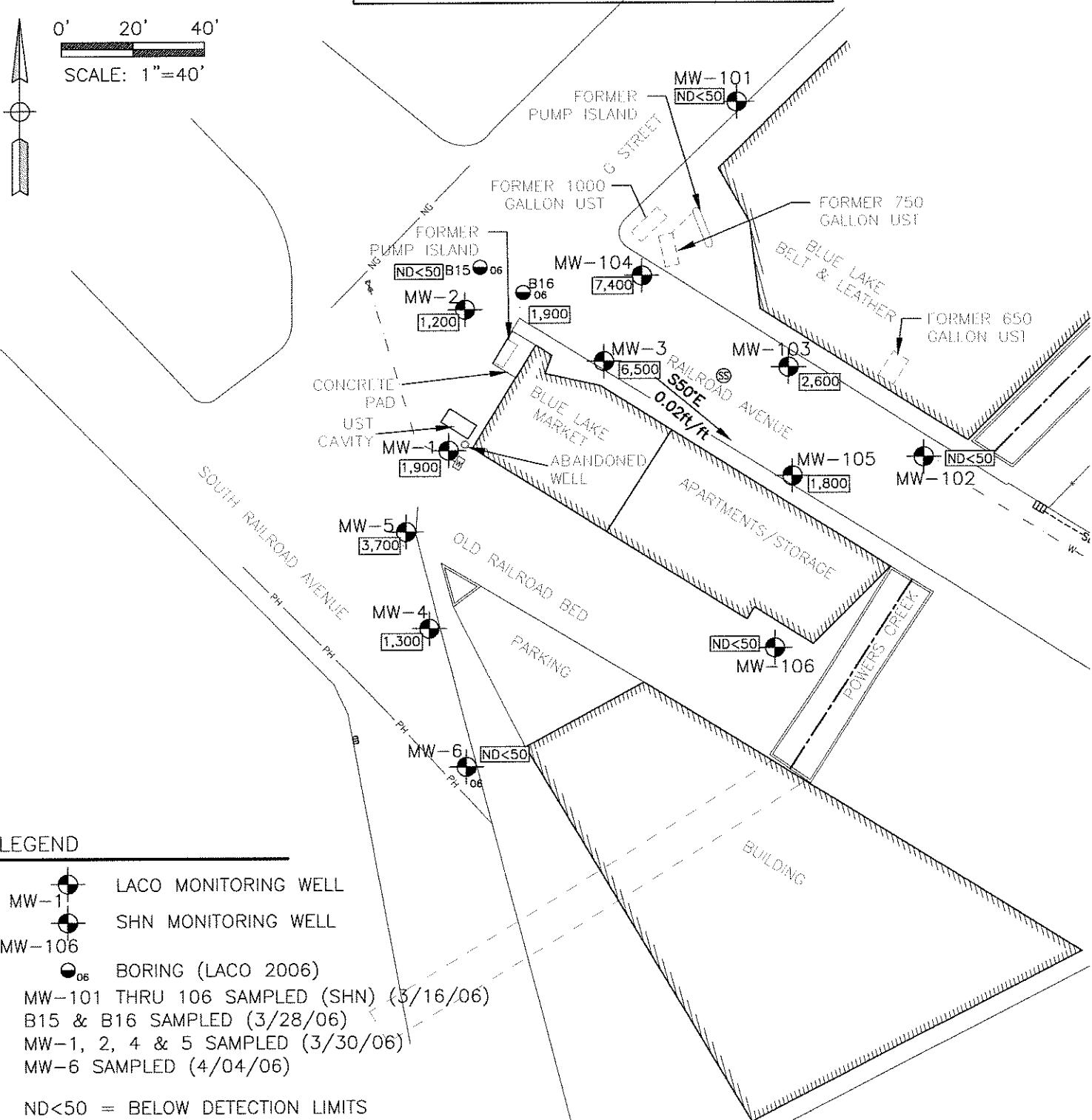
HYDRAULIC GRADIENT CALCULATED FOR FIRST QUARTER 2006,  
GROUNDWATER MONITORING REPORT BASED ON THREE POINT  
METHOD USING HYDRAULIC HEAD ELEVATIONS  
OF MW103, MW104 & MW106 ON 3/16/06



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PROJECT	REPORT OF FINDINGS	RJM	FIGURE
CLIENT	PAT FOLKINS	DATE	6/08/06
LOCATION	BLUE LAKE MARKET	CHECK	✓
	CURRENT TPHg IN GROUNDWATER, BORING & MONITORING WELLS	SCALE	1"=40'

0' 20' 40'  
SCALE: 1"=40'



ALL RESULTS REPORTED IN  
MICROGRAMS PER LITER ( $\mu\text{g/L}$ )

HYDRAULIC GRADIENT CALCULATED FOR FIRST QUARTER 2006,  
GROUNDWATER MONITORING REPORT BASED ON THREE POINT  
METHOD USING HYDRAULIC HEAD ELEVATIONS  
OF MW103, MW104 & MW106 ON 3/16/06

TABLE 1: HISTORICAL SOIL ANALYTICAL RESULTS

Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA

LOP No. 12229; LACO Project No. 3888.02

Sample Identification	Depth (feet bgs)	Sample Date	TPHg (µg/g)	Benzene (µg/g)	Toluene (µg/g)	Ethylbenzene (µg/g)	Xylenes (µg/g)	MTBE (µg/g)	Organic Lead (µg/g)
<b>2006 Investigation</b>									
3888-B15-S4.25	4.25	3/28/2006	ND<1.0	ND<0.0050	<b>0.0056</b>	ND<0.0050	ND<0.0050	ND<0.050	---
3888-B15-S8.0	8.0	3/28/2006	ND<1.0	ND<0.0050	<b>0.0054</b>	ND<0.0050	ND<0.0050	ND<0.050	---
3888-B15-S10.5	10.5	3/28/2006	<b>4.6</b>	ND<0.0050	ND<0.040	ND<0.040	ND<0.040	ND<0.050	---
3888-B15-S13.0	13.0	3/28/2006	<b>1.3</b>	ND<0.0050	ND<0.010	ND<0.0050	<b>0.0069</b>	ND<0.050	---
3888-B15-S16.0	16.0	3/28/2006	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	---
3888-B16-S4.0	4.0	3/28/2006	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	---
3888-B16-S8.0	8.0	3/28/2006	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.050	---
3888-B16-S12.0	12.0	3/28/2006	<b>15</b>	ND<0.030	ND<0.20	<b>0.049</b>	<b>0.14</b>	<b>0.051</b>	---
3888-B16-S16.0	16.0	3/28/2006	<b>1.3</b>	ND<0.0050	ND<0.040	<b>0.0056</b>	<b>0.014</b>	ND<0.050	---
3888-MW6-S8.0	8.0	3/28/2006	ND<1.0	ND<0.0050	<b>0.0071</b>	ND<0.0050	ND<0.0050	ND<0.050	---
3888-MW6-S15.0	15.0	3/28/2006	<b>54</b>	ND<0.0050	ND<1.0	ND<0.30	ND<0.60	ND<0.050	---
<b>2005 Investigation</b>									
3888-B11-S4	4	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B11-S8	8	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B11-S11.5	11.5	9/13/2005	<b>1.8</b>	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B11-S15.5	15.5	9/13/2005	<b>6.4</b>	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B12-S4	4	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B12-S8	8	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B12-S12	12	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B12-S16	16	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B13-S1.6	1.6	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B13-S8	8	9/13/2005	<b>940</b>	ND<0.5	<b>1.2</b>	<b>9.2</b>	<b>93</b>	ND<5.0	---
3888-B13-S10	10	9/13/2005	<b>150</b>	<b>0.028</b>	<b>3.1</b>	<b>3.0</b>	<b>22.7</b>	ND<0.05	---
3888-B13-S12	12	9/13/2005	<b>1,300</b>	ND<0.5	ND<8.0	<b>6.7</b>	<b>30.7</b>	ND<5.0	---
3888-B13-S13.5	13.5	9/13/2005	<b>3,000</b>	ND<1.0	ND<20	<b>20</b>	<b>92.4</b>	ND<5.0	---
3888-B13-S16	16	9/13/2005	<b>1.5</b>	ND<0.005	ND<0.005	<b>0.0099</b>	<b>0.0391</b>	ND<0.05	---
3888-B14-S4	4	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B14-S8	8	9/13/2005	<b>2.5</b>	<b>0.011</b>	ND<0.040	<b>0.014</b>	<b>0.019</b>	ND<0.05	---
3888-B14-S10	10	9/13/2005	<b>5.1</b>	<b>0.025</b>	ND<0.005	<b>0.018</b>	<b>0.029</b>	ND<0.05	---
3888-B14-S14	14	9/13/2005	<b>3.7</b>	<b>0.021</b>	ND<0.005	<b>0.046</b>	<b>0.012</b>	ND<0.05	---
3888-B14-S16	16	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-MW4-S8	8	9/14/2005	ND<1.0	ND<0.005	<b>0.0072</b>	ND<0.005	<b>0.0162</b>	ND<0.05	---
3888-MW4-S12	12	9/14/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-MW4-S14	14	9/14/2005	<b>6.6</b>	<b>0.012</b>	<b>0.023</b>	<b>0.047</b>	<b>0.029</b>	ND<0.05	---
3888-MW4-S16	16	9/14/2005	<b>1.3</b>	ND<0.005	ND<0.005	<b>0.0085</b>	<b>0.012</b>	ND<0.05	---
3888-MW5-S4	4	9/14/2005	<b>2.8</b>	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-MW5-S8	8	9/14/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-MW5-S12	12	9/14/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-MW5-S16	16	9/14/2005	<b>1.5</b>	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
<b>2004 Investigation</b>									
<b>B6</b>	4	2/23/2004	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025	---
	5	2/23/2004	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025	---
	8	2/23/2004	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025	---
	12	2/23/2004	<b>130</b>	<b>0.029</b>	<b>0.018</b>	<b>0.55</b>	<b>0.18</b>	ND<0.025	---
<b>B7</b>	5.5	2/23/2004	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025	---
	9	2/23/2004	<b>2.1</b>	<b>0.013</b>	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025	---
	13	2/23/2004	<b>1.5</b>	<b>0.035</b>	ND<0.0050	<b>0.0099</b>	<b>0.011</b>	ND<0.025	---
<b>B8</b>	---	2/23/2004	No Soil Samples Collected						
<b>B9</b>	---	2/23/2004	No Soil Samples Collected						
<b>B10</b>	---	2/23/2004	No Soil Samples Collected						

TABLE 1: HISTORICAL SOIL ANALYTICAL RESULTS

Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA

LOP No. 12229; LACO Project No. 3888.02

Sample Identification	Depth (feet bgs)	Sample Date	TPHg ( $\mu\text{g/g}$ )	Benzene ( $\mu\text{g/g}$ )	Toluene ( $\mu\text{g/g}$ )	Ethylbenzene ( $\mu\text{g/g}$ )	Xylenes ( $\mu\text{g/g}$ )	MTBE ( $\mu\text{g/g}$ )	Organic Lead ( $\mu\text{g/g}$ )
<b>2001 Investigation</b>									
B1-01	4	7/26/2001	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 0.5
B1-01	9	7/26/2001	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 0.5
B1-01	14	7/26/2001	<b>3.7</b>	<b>0.0075</b>	ND < 0.03	<b>0.027</b>	<b>0.022</b>	ND < 0.05	ND < 0.5
B2-01	4	7/26/2001	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 0.5
B2-01	9	7/26/2001	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	ND < 0.5
B2-01	14	7/26/2001	<b>4.7</b>	<b>0.02</b>	ND < 0.02	<b>0.035</b>	<b>0.024</b>	ND < 0.50	ND < 0.5
B3-01	4	7/26/2001	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	<b>0.0053</b>	ND < 0.05	ND < 0.5
B3-01	9	7/26/2001	<b>2.4</b>	ND < 0.005	ND < 0.02	ND < 0.005	<b>0.01</b>	ND < 0.05	ND < 0.5
B3-01	14	7/26/2001	<b>94</b>	ND < 0.2	ND < 0.8	<b>0.62</b>	<b>2.05</b>	ND < 0.05	ND < 0.5
B4-01	4	7/26/2001	<b>2.9</b>	<b>0.0068</b>	ND < 0.03	<b>0.0093</b>	<b>0.015</b>	ND < 0.05	ND < 0.5
B4-01	9	7/26/2001	<b>17</b>	<b>0.017</b>	ND < 0.2	ND < 0.1	ND < 0.1	ND < 0.05	ND < 0.5
B4-01	14	7/26/2001	<b>62</b>	<b>0.12</b>	ND < 0.7	<b>0.27</b>	<b>0.26</b>	ND < 0.05	ND < 0.5
B5-01	4	7/27/2001	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	<b>0.0061</b>	ND < 0.05	ND < 0.5
B5-01	9	7/27/2001	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	ND < 0.5
B5-01	14	7/27/2001	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.05	ND < 0.5
<b>1994 Investigation</b>									
B1	17	9/13/1994	<b>2.5</b>	ND < 0.0050	ND < 0.030	<b>0.015</b>	<b>0.041</b>	---	---
B2	7	9/13/1994	<b>330</b>	ND < 0.10	<b>1.7</b>	<b>3.0</b>	<b>27</b>	---	---
B3	5-9	9/13/1994	<b>770</b>	ND < 25	<b>1.7</b>	<b>3.8</b>	<b>46</b>	---	---
B4	9-14	9/13/1994	<b>25</b>	ND < 0.0050	ND < 0.040	ND < 0.25	ND < 0.25	---	---
B5	8.5	9/13/1994	<b>1,400</b>	ND < 1.0	ND < 10	<b>7.3</b>	<b>23</b>	---	---
<b>1994 Investigation continued</b>									
MW1	5-6.5	12/23/1994	ND < 1.0	ND < 0.0050	<b>0.0083</b>	ND < 0.0050	<b>0.01</b>	---	---
	10-11.5	12/23/1994	<b>6.2</b>	<b>0.041</b>	ND < 0.050	ND < 0.050	ND < 10	---	---
	15-16.5	12/23/1994	<b>170</b>	ND < 0.050	ND < 0.10	ND < 2.0	ND < 2.0	---	ND < 5.0
MW2	10-11.5	12/23/1994	<b>1,100</b>	ND < 0.50	<b>16</b>	<b>14</b>	<b>102</b>	---	---
	15-16.5	12/23/1994	<b>1.9</b>	ND < 0.0050	<b>0.028</b>	<b>0.039</b>	<b>0.236</b>	---	---
MW3	10-11.5	12/23/1994	<b>52</b>	<b>0.1</b>	<b>1.7</b>	<b>0.53</b>	<b>2.9</b>	---	---
	15-16.5	12/23/1994	<b>140</b>	<b>0.1</b>	ND < 2.0	<b>0.65</b>	<b>2.77</b>	---	---
<b>1990 Tank Removal</b>									
East Sample	7	2/21/1990	<b>100</b>	ND < 0.50	ND < 0.50	<b>1.3</b>	<b>1.64</b>	---	---
West Sample	7	2/21/1990	<b>680</b>	ND < 0.50	<b>3.7</b>	<b>7.3</b>	<b>48</b>	---	---

## NOTES:

TPHg - total petroleum hydrocarbons as gasoline

MTBE - methyl tertiary butyl ether

Additional analytes include the fuel oxygenates

bgs = below ground surface

3888-B11-S4 = project number, boring B11, soil sample collected at 4 feet bgs

B1-01 = boring B1 installed in 2001

ND = non-detect at reporting limit shown

**Bold** results indicate analyte detection

--- = not sampled or analyzed

All results reported in micrograms per gram =  $\mu\text{g/g}$

TABLE 2: HISTORICAL ANALYTICAL RESULTS FOR GROUNDWATER - BORINGS

Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA

LOP No. 12229; LACO Project No. 3888.02

Boring Identification	Sample Date	TPHg ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	Additional Analytes ( $\mu\text{g/L}$ )	Organic Lead ( $\mu\text{g/L}$ )
<b>2006 Investigation</b>									
3888-B15-GW	3/28/2006	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	---	---
<b>3888-B16-GW</b>	<b>3/28/2006</b>	<b>1,900</b>	ND<5.0	ND<40	ND<10	ND<6.0	ND<10	---	---
<b>2005 Investigation</b>									
3888-B11-W	9/13/2005	<b>1,500</b>	<b>2.9</b>	<b>3.9</b>	<b>0.80</b>	<b>3.5</b>	ND<1.0	ND<1-10	---
3888-B12-W	9/13/2005	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	---
3888-B13-W	9/13/2005	<b>280,000</b>	<b>25</b>	<b>60</b>	<b>3,900</b>	<b>15,300</b>	ND<50	ND<50-500	---
3888-B14-W	9/13/2005	<b>3,300</b>	<b>210</b>	<b>34</b>	<b>110</b>	<b>63.2</b>	ND<50	ND<50-500	---
<b>2004 Investigation</b>									
B6	2/23/2004	<b>41,000</b>	<b>330</b>	<b>44</b>	<b>550</b>	<b>180</b>	ND<50	ND<50-100	---
B7	2/23/2004	<b>2,500</b>	<b>220</b>	<b>25</b>	<b>33</b>	<b>25.4</b>	ND<1.0	ND<1.0-10	---
B8	2/23/2004	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	---
B9	2/23/2004	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	---
B10	2/23/2004	97	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	---
<b>2001 Investigation</b>									
B1-01	7/27/2001	<b>1,900</b>	<b>74</b>	<b>16</b>	<b>33</b>	<b>8.8</b>	ND<1.0	All ND	ND<0.010
B2-01	7/27/2001	<b>2,800</b>	<b>180</b>	<b>24</b>	<b>67</b>	<b>17.4</b>	ND<1.0	All ND	ND<0.010
B3-01	7/27/2001	<b>17,000</b>	<b>370</b>	<b>76</b>	<b>440</b>	<b>756</b>	ND<1.0	All ND	ND<0.010
B4-01	7/27/2001	<b>1,900</b>	<b>110</b>	<b>13</b>	<b>26</b>	<b>22.3</b>	ND<1.0	All ND	ND<0.010
B5-01	7/27/2001	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	All ND	ND<0.010
<b>1994 Investigation</b>									
B1	9/13/1994	<b>No Groundwater Samples Collected</b>							
B2	9/13/1994	<b>No Groundwater Samples Collected</b>							
B3	9/13/1994	<b>No Groundwater Samples Collected</b>							
B4	9/13/1994	<b>No Groundwater Samples Collected</b>							
B5	9/13/1994	<b>No Groundwater Samples Collected</b>							
<b>1990 Tank Removal</b>									
Cavity	2/21/1990	<b>4,300</b>	<b>250</b>	<b>410</b>	<b>240</b>	<b>1,200</b>	---	---	---
Abandoned Well	2/21/1990	<b>1,100</b>	<b>13</b>	<b>49</b>	<b>18</b>	<b>117</b>	---	---	---

## NOTES:

TPHg - total petroleum hydrocarbons as gasoline

MTBE - methyl tertiary butyl ether

Additional analytes include the fuel oxygenates

3888-B11-W = project number, boring B11, water sample

B1-01 = boring B1 installed in 2001

ND = non-detect at reporting limit shown

Bold results indicate analyte detection

--- = not sampled or analyzed

All results reported in micrograms per liter =  $\mu\text{g/L}$

TABLE 3: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS  
 Blue Lake Market, 410 Railhead Avenue, Blue Lake, CA  
 LOP No. 12229, LACO Project No. 3888.02

WELL/ Sample Date	Groundwater Measurements			Analytical Results						
	Well Head Elevation (feet NAVD-88)	Hydraulic Head (feet NAVD-88)	Depth to Water (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	FOOT NOTES
<b>MW-1</b>	(SCREENED 5-15 FEET BGS)									
1/2/29/1994	93.28	88.27	5.01	...	...	...	...	...	...	
1/12/1995	89.18	4.10	2,000	53	16	42	49	...	...	
2/27/1995	87.05	6.23	...	...	...	...	...	...	...	
3/22/1995	86.80	6.48	...	...	...	...	...	...	...	
4/12/1995	87.42	5.86	1,100	40	25	49	59	...	...	
5/8/1995	86.94	6.34	...	...	...	...	...	...	...	
6/6/1995	86.43	6.85	...	...	...	...	...	...	...	
8/11/1995	82.82	10.46	...	...	...	...	...	...	...	
10/31/1995	81.13	12.15	4,100	280	37	63	46	...	...	
12/14/1995	88.52	4.76	...	...	...	...	...	...	...	
1/15/1996	88.80	4.48	...	...	...	...	...	...	...	
4/5/1996	87.62	5.66	4,200	180	230	370	ND <100	2	...	
8/2/1996	82.37	10.91	...	...	...	...	...	...	...	
5/2/1997	87.22	6.06	3,900	170	50	120	105	ND <100	1,2	
8/15/1997	82.03	11.25	4,700	610	75	88	81	ND <100	1,2	
5/13/1998	86.54	6.74	810	25	5	33	16	ND <25	1,2	
5/14/1999	86.64	6.64	2,400	220	38	96	57	97	1	
8/10/1999	82.28	11.00	6,800	850	110	470	298	ND <200	1,2	
12/21/1999	88.23	5.05	320	41	4.2	15	4.9	ND >40	2	
3/17/2000	88.17	5.11	5,200	270	28	45	36	ND >80	1,2	
6/17/2000	86.64	6.64	5,300	330	85	250	183	ND <200	1,2,4	
9/13/2000	81.14	12.14	4,600	690	37	110	25	ND <140	1,2	
12/1/2000	82.00	7.45	7,900	410	53	210	79	ND >200	1,3	
3/1/2001	83.05	6.40	970	88	12	41	20	ND >50	1,2	
6/4/2001	80.39	9.06	3,700	210	17	160	49	ND >4.3	2	
9/7/2001	77.35	12.10	3,100	690	30	53	37	ND >4.0	1	
12/3/2001	84.96	4.49	71	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	
3/13/2002	84.52	4.93	420	11	ND <5.0	5.4	3.8	ND >27	1,2	
6/5/2002	81.00	8.45	2,400	63	32	49	39	ND >70	1,2	
9/3/2002	81.27	12.01	3,800	210	ND >70	29	ND >25	ND >10	1,2	
1/2/2003	88.72	4.56	400	ND >2.0	ND >4.0	ND >2.0	ND >5.0	ND >5.0	ND >5.0	
3/3/2003	...	...	ND >5.0	ND >5.0	ND >5.0	ND >5.0	ND >5.0	ND >5.0	ND >5.0	
6/2/2003	86.63	6.65	43	ND >30	ND >30	29	9.6	ND >30	2,5,6	
9/1/2003	81.80	11.48	1,400	69	ND >14	ND >15	ND >8.0	ND >5.0	ND >5.0	
12/1/2004	86.70	6.58	330	4.9	ND >4.0	1.7	0.91	ND >4.0	2,11	
3/1/2005	87.32	5.96	990	ND <10	ND >15	19	ND >8.0	ND >7.0	2,5,6	
6/1/2005	86.81	6.47	1,60	ND <0.50	ND <0.50	0.54	ND <0.50	ND <0.50	ND <0.50	
9/1/2005	82.37	10.91	1,500	21	ND >28	33	11	ND >60	5,6	
12/1/2005	89.67	3.61	1,000	37	ND >18	ND >18	ND >3.0	ND >4.0	ND >4.0	
3/30/2006	87.38	5.90	1,300	9.1	ND <15	3.4	2.4	ND >50	ND >50	
			1,900	9.3	1.6	4.1	3.8	ND >1.0	ND >1.0	

**TABLE 3: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**  
 Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA  
 LOP No. 12229, LACO Project No. 3888-02

WELL/ Sample Date	Well Head Elevation (feet NAVD-88)	Groundwater Measurements			Analytical Results					
		Hydraulic Head (feet NAVD-88)	Depth to Water (feet)	TPH <sub>g</sub> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTEB (µg/L)	FOOT NOTES
<b>MW-2 (SCREENED 4-14 FEET BGS)</b>										
12/29/1994	95.13	89.00	6.13	—	—	—	—	—	—	—
1/12/1995	90.05	5.08	10,000	14	290	250	—	—	—	—
2/27/1995	87.63	7.50	—	—	—	—	—	—	—	—
3/22/1995	87.55	7.58	—	—	—	—	—	—	—	—
4/12/1995	88.13	7.00	1,400	1.0	36	24	—	—	310	—
5/8/1995	87.68	7.45	—	—	—	—	—	—	—	—
6/6/1995	87.19	7.94	—	—	—	—	—	—	—	—
8/11/1995	83.57	11.56	—	—	—	—	—	—	—	—
10/31/1995	82.25	12.88	—	—	—	—	—	—	—	—
12/14/1995	89.18	5.95	—	—	—	—	—	—	—	—
1/15/1996	89.15	5.98	—	—	—	—	—	—	—	—
4/5/1996	88.31	6.82	5,500	7.3	85	92	720	ND<5.0	—	—
8/21/1996	83.08	12.05	—	—	—	—	—	—	—	—
5/2/1997	87.86	7.27	5,800	12	95	170	860	ND<50	2	—
8/15/1997	82.31	12.82	—	—	—	—	—	—	—	—
5/13/1998	87.25	7.88	3,700	5.8	28	100	510	ND<25	1,2	—
5/14/1999	87.32	7.81	9,800	21	210	380	1,910	13	1	—
8/10/1999	82.59	12.54	2,400	15	40	67	306	ND<25	1,2	—
12/21/1999	88.93	6.20	14,000	33	110	560	2,290	ND<50	—	—
3/12/2000	88.70	6.43	7,000	8.6	86	160	820	ND<30	1,3	—
6/12/2000	87.31	7.82	12,000	19	200	290	1,630	ND<30	1,3	—
9/13/2000	82.32	12.81	—	—	—	—	—	—	—	—
12/1/2000	85.23	6.04	9,800	19	120	220	1,010	ND<39	1,2	—
3/1/2001	83.73	7.54	3,000	9	43	100	502	ND<30	3	—
6/4/2001	81.22	10.05	2,300	5	8.4	35	229.3	ND<41	2	—
9/7/2001	78.42	12.85	—	—	—	—	—	—	—	—
12/3/2001	85.48	5.79	4,700	7.3	43	110	650	ND<4.0	1	—
3/13/2002	84.83	6.44	15,000	29	290	640	2,600	ND<70	1,2	—
6/5/2002	81.95	9.32	3,400	9.8	21	87	253	ND<41	1,2	—
9/3/2002	82.23	12.90	Insufficient water in the well to obtain a sample							
1/2/2003	89.35	5.78	12,000	97	470	—	—	—	—	—
3/2/2003	87.76	7.37	ND<25	ND<5.5	—	—	—	—	—	—
6/2/2003	87.01	7.8	860	0.76	2.4	12.3	—	—	—	—
9/11/2003	82.47	12.66	3,900	28	6.6	28.0	75.0	ND<3.0	5	—
12/1/2003	88.02	7.11	6,700	14	53	190	468	ND<35	2,5	—
3/3/2004	88.18	6.95	2,200	1.2	62	330	1,130	ND<30	3,5	—
6/9/2004	85.70	9.43	970	ND<10	ND<10	50	161	ND<1.0	5	—
9/2/2004	81.32	13.81	2,600	16	26	92	58	ND<3.0	2,3,5	—
12/1/2004	87.25	7.88	2,200	5	15	110	258	ND<30	3,10	—
3/1/2005	87.80	7.33	1,100	ND<2.0	10	19	291	ND<30	3,5	—
6/1/2005	87.51	7.62	970	1.1	ND<15	9.0	53.9	ND<3.0	2,41	—
9/1/2005	82.80	12.33	3,200	19	57	130	410	ND<30	3,5	—
12/1/2005	90.22	4.91	1,500	ND<5.0	6.9	63	167	ND<30	—	—
3/30/2006	87.94	7.19	1,200	0.69	ND<0.50	8.0	17	ND<4.0	17	—

TABLE 3: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS  
 Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA  
 LOP No. 12229; LACO Project No. 3888.02

WELL/ Sample Date	Groundwater Measurements			Analytical Results						
	Well Head (feet NAVD-88)	Hydraulic Head (feet NAVD-88)	Depth to Water (feet)	TPHg ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	FOOT NOTES
MW-3 12/29/1994 (SCREENED 5-15 FEET BGS)	95.45	88.50	6.95	21,000	130	590	170	770	—	—
1/12/1995	89.22	6.23	—	—	—	—	—	—	—	—
2/27/1995	88.47	6.98	—	—	—	—	—	—	—	—
3/22/1995	88.37	7.08	—	—	—	—	—	—	—	—
4/12/1995	87.82	7.63	14,000	130	430	360	2,080	—	—	—
5/8/1995	87.45	8.00	—	—	—	—	—	—	—	—
6/6/1995	86.93	8.52	—	—	—	—	—	—	—	—
8/11/1995	83.02	12.43	—	—	—	—	—	—	—	—
10/31/1995	81.43	14.02	—	—	—	—	—	—	—	—
12/14/1995	88.73	6.72	—	—	—	—	—	—	—	—
1/15/1996	88.93	6.52	—	—	—	—	—	—	—	—
4/5/1996	88.15	7.30	11,000	120	330	260	980	ND<500	2	—
8/2/1996	82.57	12.88	—	—	—	—	—	—	—	—
5/21/1997	87.48	7.97	7,600	46	110	79	459	ND<100	2	—
8/15/1997	82.02	13.43	7,600	160	440	160	630	ND<100	2	—
5/13/1998	87.00	8.45	9,100	76	280	280	1,390	ND<500	2	—
5/14/1999	87.09	8.36	5,200	74	160	180	640	140	—	—
8/10/1999	82.26	13.19	14,000	130	310	130	510	ND>200	1.2	—
12/21/1999	88.16	7.29	6,400	87	340	260	810	ND<300	2	—
12/21/1999	Duplicate		5,200	80	260	210	710	ND<400	2	—
3/1/2000	88.20	7.25	7,200	64	390	180	730	ND<150	1.3	—
6/1/2000	87.09	8.36	7,100	73	330	170	630	ND<140	2	—
9/13/2000	81.52	13.93	—	—	—	—	—	—	—	—
12/1/2000	83.54	8.07	13,000	79	290	230	720	ND<150	1.3	—
3/1/2001	83.43	8.18	8,500	78	330	200	680	ND<150	3	—
6/4/2001	80.70	10.91	4,800	14	14	68	103.4	ND<0.5	2	—
9/7/2001	77.41	14.20	—	—	—	—	—	—	—	—
12/3/2001	84.83	6.78	9,900	24	52	210	454	ND<1.0	1	—
3/13/2002	84.28	7.33	—	—	—	—	—	—	—	—
6/5/2002	81.38	10.23	8,100	28	ND<140	69	147	ND<250	1.2	—
9/3/2002	81.57	13.88	—	—	—	—	—	—	—	—
1/2/2003	88.50	6.95	23,000	390	2,700	810	4,000	ND<150	—	—
3/3/2003	87.50	7.95	7,500	32	ND<180	62	415	ND<200	—	—
6/2/2003	87.03	8.42	5,600	36	ND<110	86	180	ND<170	5.6,7	—
9/1/2003	82.04	13.41	9,900	230	210	120	680	ND<270	5.6	—
12/1/2003	87.62	7.83	10,000	77	120	200	594	ND<400	5.6	—
3/3/2004	87.84	7.61	4,500	7.5	12	48	206	ND<10	5	—
6/9/2004	85.06	10.39	4,800	ND<50	ND<100	55	89	ND<170	5.6	—
9/2/2004	81.77	13.68	4,500	59	50	73	109	ND<140	5.6	—

Inufficient water in the well to obtain a sample

TABLE 3: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS  
 Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA  
 LOP No. 12229; LACO Project No. 3888.02

Groundwater Measurements						Analytical Results				
WELL/ Sample Date	Well Head Elevation (feet NAVD-88)	Hydraulic Head (feet NAVD-88)	Depth to Water (feet)	TPH <sub>HG</sub> (µg/L)	Benzene (µg/L.)	Toluene (µg/L.)	Ethylbenzene (µg/L.)	Xylenes (µg/L.)	MTBE (µg/L.)	FOOT NOTES
<b>MW-3 (continued)</b>										
12/1/2004										
3/1/2005	87.06	8.39	7,500	120	340	180	554	ND<300	ND<1.5	
6/1/2005	87.61	7.84	11,000	160	690	370	1,010	...	5	
	87.36	8.09								
6/1/2005 *										
9/1/2005 *	87.38	8.07	10,000	120	480	340	820	...	...	
12/1/2005	82.53	12.92								
12/5/2005*	...	...								
3/1/2006*	88.14	7.31	6,700	68	160	110	208	...	5	
3/16/2006*	88.24	7.21	14,000	180	1,600	480	1,900	...		
3/30/2006	87.80	7.65	6,500	49	250	140	480	...		
<b>MW-4</b>	(SCREENED 10-15 FEET BGS)									
12/1/2005	93.06	---	Dry							
3/30/2006	86.13	6.93	1,300	19						
<b>MW-5</b>	(SCREENED 10-15 FEET BGS)									
12/1/2005	92.81	89.00	3.81	1,400	27	12	42	24	ND<25	
3/30/2006	86.74	6.07	3,700	110	22	97	154	ND<1.0		
<b>MW-6</b>	(SCREENED 5-15 FEET BGS)									
4/4/2006	93.80	85.76	8.04	ND>50		ND<0.50	ND<0.50	ND<0.50	ND<3.0	
<b>MW-101*</b>	(SCREENED 5-15 FEET BGS)									
3/1/2001	96.31	88.72	7.59	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/4/2001	86.61	9.70	13.04	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
9/4/2001	82.67	13.04	---	---	---	---	---	---	---	
12/3/2001	90.47	5.84	160	ND>5	ND<4.0	ND<0.5	ND<0.5	ND<0.5	ND<3.0	1.2
3/1/2002	89.13	7.18	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/5/2002	87.18	9.13	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
9/3/2002	82.65	13.66	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
12/2/2002	83.15	13.16	64	ND<0.5	ND<2.8	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
3/3/2003	88.93	7.38	ND>50	ND<0.5	ND<2.8	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/2/2003	88.50	7.81	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	
9/1/2003	---	---	---	---	---	---	---	---	---	
12/1/2003	89.00	7.31	50	ND>50	ND<1.4	ND<0.50	ND<0.50	ND<0.50	ND<3.0	2.8, 9
3/3/2004	89.71	6.60	ND>50	ND<1.4	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	
6/1/2004	88.37	7.94	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	
9/2/2004	82.91	13.40	90	ND>50	ND<3.0	ND<0.50	ND<0.50	ND<0.50	ND<3.0	2, 8
12/1/2004	88.35	7.96	ND>50	No sample collected	No sample collected	No sample collected	No sample collected	No sample collected	No sample collected	
3/1/2005	88.51	7.80	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
6/1/2005	88.30	8.01	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	12
9/1/2005	---	DRY								
12/5/2005	89.26	7.05	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
3/16/2006	89.33	6.98	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	

**TABLE 3: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS**  
 Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA  
 LOP No. 12229; LACO Project No. 3888-02

WELL/ Sample Date	Groundwater Measurements			Analytical Results						
	Well Head Elevation (feet NAVD-88)	Hydraulic Head (feet NAVD-88)	Depth to Water (feet)	TPHg ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	FOOT NOTES
<b>MW-102*</b>	(SCREENED 5-20 FEET BGS)									
3/1/2001	95.49	87.57	7.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0
6/4/2001	85.06	10.43	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0
9/4/2001	81.81	13.68	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0
12/3/2001	88.66	6.83	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0
3/1/2002	87.93	7.56	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0
6/5/2002	85.62	9.87	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0
9/3/2002	81.76	13.73	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0
12/2/2002	82.28	13.21	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0
3/3/2003	87.87	7.62	ND>50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0
6/2/2003	87.47	8.02	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
9/1/2003	---	---	---	---	---	---	---	---	---	---
12/1/2003	87.84	7.65	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
3/3/2004	88.26	7.23	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
6/1/2004	87.20	8.29	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
9/2/2004	82.06	13.43	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
12/1/2004	87.47	8.02	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
3/1/2005	87.83	7.66	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
6/1/2005	87.69	7.80	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
9/1/2005	82.62	12.87	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
12/5/2005	88.26	7.23	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---
3/16/2006	88.42	7.07	ND>50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0
<b>MW-103*</b>	(SCREENED 6-19 FEET BGS)									
3/1/2001	95.92	87.71	2.900	27	37	35	63	ND<60	1,2	
6/4/2001	85.21	10.71	3,200	42	ND>80	16	30,4	ND<30	1,2	
9/4/2001	81.93	13.99	1,300	18	ND>40	8	5,4	ND<32	1,2	
12/3/2001	88.93	6.99	5,700	150	160	95	219	ND<150	1,2	
3/1/2002	88.03	7.89	5,700	100	170	83	380	ND<150	2	
6/5/2002	85.71	10.21	3,900	25	ND<110	35	50	ND>80	1,2	
9/3/2002	81.86	14.06	1,600	21	ND<35	11	7,0	ND>30	1,2	
12/2/2002	82.42	13.50	5,700	280	110	190	336	ND<120		
3/3/2003	87.95	7.97	4,400	47	ND>300	74	22,9	---		
6/2/2003	87.54	8.38	2,400	14	ND>70	15	17,3	ND>30	3,5,6	
9/1/2003	---	---	---	---	---	---	---	---		
12/1/2003	87.99	7.93	3,500	49	ND>90	48	58,6	---	8	
3/3/2004	88.38	7.54	5,800	100	160	130	343	---		
6/1/2004	87.32	8.60	2,100	15	ND<110	32	40	---		
9/1/2004	82.19	13.73	1,800	36	18	24	28,8	---	5	
12/1/2004	87.60	8.32	2,400	42	40	41	47,4	---	5	
3/1/2005	88.01	7.91	3,700	58	82	67	125	---	5	
6/1/2005	87.83	8.09	2,700	33	47	46	79	---	5	
9/1/2005	82.80	13.12	7,400	130	110	230	446	---	5	
12/5/2005	88.48	7.44	3,900	70	81	87	156	---	5	
3/16/2006	88.61	7.31	2,600	23	26	36	30	ND<30	---	

TABLE 3: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA

LOP No. 12229, LACO Project No. 3888.02

WELL/ Sample Date	Groundwater Measurements			Analytical Results						
	Well Head Elevation (feet NAVD-88)	Hydraulic Head (feet NAVD-88)	Depth to Water (feet)	TPH <sub>g</sub> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	FOOT NOTES
<b>MW-104*</b> (SCREENED 5-17 FEET BGS)										
6/4/2001	96.19	86.25	9.94	17,000	260	320	40	1,510	ND>360	2
9/4/2001	82.52	13.67	9,800	120	ND>300	330	546	ND>400	ND>400	2
12/3/2001	90.04	6.15	33,000	870	520	1,600	4,650	ND>900	ND>900	1,2
3/1/2002	88.84	7.35	20,000	400	450	910	2,480	ND>650	ND>650	2
6/5/2002	86.79	9.40	21,000	370	880	890	2,610	ND>600	ND>600	2
9/3/2002	82.39	13.80	7,400	100	ND>200	270	361	ND>150	ND>150	1,2
12/2/2002	83.18	13.01	13,000	260	210	630	1,191	ND>320	ND>320	
3/3/2003	88.68	7.51	20,000	430	560	950	2,330	ND>600	ND>600	6
6/2/2003	88.26	7.93	26,000	540	1,100	1,300	3,630	ND>600	ND>600	
9/1/2003	---	---	---	---	---	---	---	---	---	
12/1/2003	88.83	7.36	25,000	760	520	1,300	2,700	ND>160	ND>160	5
3/3/2004	89.43	6.76	21,000	400	460	1,000	2,010	ND>160	ND>160	
6/1/2004	88.14	8.05	26,000	500	680	1,200	2,420	ND>160	ND>160	
9/2/2004	82.90	13.29	3,700	55	49	140	1,68	ND>160	ND>160	5
12/1/2004	88.18	8.01	16,000	430	480	990	2,090	ND>160	ND>160	4,5
3/1/2005	88.68	7.51	17,000	200	350	590	1,280	ND>160	ND>160	5
6/1/2005	88.47	7.72	13,000	130	230	490	1,010	ND>160	ND>160	
9/1/2005	83.51	12.68	8,300	63	88	270	519	ND>160	ND>160	5
12/5/2005	89.40	6.79	10,000	59	100	580	553	ND>160	ND>160	
3/16/2006	89.39	6.80	7,400	43	75	130	267	ND>160	ND>160	
<b>MW-105*</b> (SCREENED 5-15 FEET BGS)										
6/4/2001	95.33	84.76	10,57	430	ND<0.5	ND<7.0	ND<1.2	ND<3.0	ND<3.0	
9/4/2001	81.48	13.85	650	ND<0	ND<9.0	ND<1.5	ND<1.2	ND<1.5	ND<1.5	
12/3/2001	88.49	6.84	4,700	11	ND>40	1.8	ND>10	ND>10	ND>10	
3/1/2002	87.64	7.69	260	1.7	ND<6.0	ND<0.50	ND<0.50	ND<6.0	ND<6.0	
6/5/2002	85.32	10.01	140	ND<0.50	ND<3.0	ND<1.0	ND<1.0	ND<3.0	ND<3.0	
9/3/2002	81.42	13.91	360	ND<0.50	ND<1.0	2.1	0.82	ND<1.0	ND<1.0	
12/2/2002	81.94	13.39	680	6.0	ND<11	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
3/3/2003	87.58	7.75	280	ND<1.5	ND<3.5	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
6/2/2003	87.16	8.17	210	ND<0.50	ND<5.5	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2,5
9/1/2003	---	---	---	---	---	---	---	---	---	
12/1/2003	87.57	7.76	1,500	ND<0	ND<40	3.8	1,60	ND>160	ND>160	
3/3/2004	87.98	7.35	390	ND<2.0	ND<17	0.93	0.53	ND>1.5	ND>1.5	
6/1/2004	86.89	8.44	210	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND>1.5	ND>1.5	
9/2/2004	81.72	13.61	210	ND<0.50	ND<9.0	ND<0.50	ND<0.50	ND>1.5	ND>1.5	
12/1/2004	87.18	8.15	590	ND<2.0	ND<18	1.3	0.73	ND>1.5	ND>1.5	
3/1/2005	87.57	7.76	680	ND<2.5	ND<30	ND<2.0	ND>2.0	ND>2.0	ND>2.0	
6/1/2005	87.39	7.94	510	1.7	ND<1	0.57	0.57	ND>1.5	ND>1.5	
9/1/2005	82.28	13.05	470	8.2	ND<15	3.6	2.15	ND>1.5	ND>1.5	
12/5/2005	88.02	7.31	2,600	7.2	ND>70	8.3	4.6	ND>1.5	ND>1.5	
3/16/2006	88.16	7.17	1,800	3.5	ND>60	6.7	3.3	ND>1.5	ND>1.5	

TABLE 3: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS  
 Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA  
 LOP No. 12229; LACO Project No. 3888.02

WELL/ Sample Date	Groundwater Measurements			Analytical Results						
	Well Head Elevation (feet NAVD-88)	Hydraulic Head (feet NAVD-88)	Depth to Water (feet)	TPHg ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	FOOT NOTES
<b>MW-106*</b>	<b>(SCREENED 5-15 FEET BGS)</b>									
3/1/2001	92.88	86.97	5.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
6/4/2001		84.43	8.45	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
9/4/2001		80.96	11.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
12/3/2001		87.92	4.96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2
3/1/2002		87.29	5.59	ND<50	<b>0.74</b>	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
6/5/2002		84.97	7.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
9/3/2002		80.89	11.99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
12/2/2002		81.45	11.43	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
3/3/2003		87.24	5.64	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	
6/2/2003		86.84	6.04	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
9/1/2003		...	...	...	...	...	...	...	...	
12/1/2003		87.17	5.71	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
3/3/2004		87.64	5.24	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
6/1/2004		86.61	6.27	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
9/2/2004		81.23	11.65	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
12/1/2004		86.90	5.98	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
3/1/2005		87.26	5.62	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
6/1/2005		87.09	5.79	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
9/1/2005		81.85	11.03	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
12/5/2005		87.74	5.14	110	<b>4.4</b>	<b>3.7</b>	<b>1.6</b>	<b>1.1</b>	<b>1.1</b>	
3/16/2006		87.83	5.05	ND<50	<b>0.85</b>	<b>0.58</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	<b>ND&lt;0.50</b>	
<b>OBS-1</b>	<b>(SCREENED 5-10 FEET BGS)</b>									
	89.45	82.49	6.96	...	...	...	...	...	...	
<b>OBS-2</b>	<b>(SCREENED 5-10 FEET BGS)</b>			91.29	83.78	7.51	...	...	...	

Reference NAVD 88: Elevations established 7/29/02 by R. Smith, LS using Caltrans HPGN monument "DCA 01 RGB" North Arcata at Gratiot & Hwy 101

\* Hydraulic head data and laboratory analytical results are provided by SHN.

**Bold** indicates analyte detection

A key to abbreviations is provided as Attachment 2.

# **Attachment 1**

**ATTACHMENT 1 : KEY TO ABBREVIATIONS**

Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA

LOP No. 12229; LACO Project No. 3888.02

<b>KEY TO ABBREVIATIONS</b>	
AL	-- action limit; a non-enforceable California drinking water standard; shown in parentheses.
BTEX	-- Benzene; Toluene; Ethylbenzene; m,p- and o-Xylenes
CO <sub>2</sub>	-- Carbon dioxide
COC	-- Chain of custody
CRWQCB	-- California Regional Water Quality Control Board
DHP	-- Down-hole-pump (submersible pump)
DIPE	-- Di-isopropyl Ether
DO	-- Dissolved Oxygen
DTW	-- Depth-to-Water
ECw	-- Electrical Conductivity in water
ETBE	-- Ethyl Tertiary Butyl Ether
FP	-- Free Product
MCL	-- Maximum contaminant level, an enforceable California drinking water standard.
MTBE	-- Methyl Tertiary Butyl Ether
ND<50	-- non-detect at reporting limits shown
NOT	-- Sample not analyzed for parameter
ACTIVE	-- during current sampling event
ORP	-- Oxidation Reduction Potential
PCE	-- Perchloroethene same as tetrachloroethene
pH	-- Potential of hydrogen
SGC	-- Silica gel cleanup
T	-- Temperature
TAME	-- Tertiary Amyl Methyl Ether
TBA	-- Tertiary Butyl Alcohol
TBF	-- Tertiary Butyl Formate
Tot	-- Taste and odor threshold, a non-enforceable California drinking water standard.
TPHg	-- Total Petroleum Hydrocarbons as Gasoline
µg/L	-- Micro grams per liter (parts per billion)
---	-- Not analyzed or not available

# **Attachment 2**

# ENVIRONMENTAL BORING LOG

Boring No.

**B15**
**PROJECT: BLUE LAKE MARKET**
**BORING LOCATION: APPROX. 10 FEET NE OF MW2**
**DRILLING METHOD: DIRECT PUSH**
**DRILLER: LACO**
**DEPTH TO WATER: INITIAL : 10.5**
**PROJECT NO.: 3888.02**
**DATE: 3/28/06**
**ELEVATION: APPROX. 95 FEET MSL**
**LOGGED BY:**
**COMPLETION : NA**
**SITE GEOLOGY: UPLIFTED FLUVIAL AND FLOODPLAIN DEPOSITS**

ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D. ppm	Hanby result
0		FILL	ASPHALT AGGREGATE BASE		
2.5		GM	SILTY GRAVEL WITH SAND; Dark Brown, loose, moist; Approximately 35% poorly graded fine sand, 35% poorly graded fine and medium gravel, 30% silt; No petroleum hydrocarbon odor.		
5		ML	SILT WITH SAND; Dark brown, low plasticity, firm, moist; Approximately 75% silt, 10% clay, 15% poorly graded fine sand		
7.5					
10		GM	SILTY GRAVEL WITH SAND; Gray, loose, wet to saturated; Approximately 60% poorly graded fine and medium gravel, 25% poorly graded fine sand, 15% silt; No petroleum hydrocarbon odor.	0	
12.5		ML	SILT; Dark brown, medium to high plasticity, stiff to hard, moist; Approximately 50% silt, 40% clay, 10% poorly graded fine sand; No petroleum hydrocarbon odor.		
15		GM	SILT WITH SAND; Dark brown, medium plasticity, stiff, moist; Approximately 60% silt, 15% clay, 25% poorly graded fine sand; No petroleum hydrocarbon odor.	0	
17.5		ML	SILTY GRAVEL WITH SAND; Dark gray, loose, wet to saturated; Approximately 60% poorly graded fine and medium gravel, 25% poorly graded fine sand, 15% silt; No petroleum hydrocarbon odor.		
		GM	SILT; Dark brown, medium to high plasticity, stiff to firm, moist; Approximately 50% silt, 40% clay, 10% poorly graded fine sand; No petroleum hydrocarbon odor.		
			SILTY GRAVEL WITH SAND; Dark brown, loose, wet to saturated; Approximately 60% well graded fine, medium, and coarse gravel, 25% poorly graded fine and medium sand, 15% silt; No petroleum hydrocarbon odor.		
			HALT AT 16 FEET BGS		

Hand auger advanced to 4 feet bgs for utility clearance. Soil samples collected at 4.25, 8.0, 10.5, 13.0, and 16.0 feet bgs. Groundwater grab sample collected.

**Figure**

# ENVIRONMENTAL BORING LOG

Boring No.

B16

**PROJECT: BLUE LAKE MARKET**

**BORING LOCATION: APPROX. 15 FEET SE OF B15**

**DRILLING METHOD: DIRECT PUSH**

**DRILLER: LACO**

**DEPTH TO WATER: INITIAL :** 12.0

**PROJECT NO.: 3888.02**

**DATE: 3/28/06**

**ELEVATION: APPROX. 95 FEET MSL**

**LOGGED BY:**

**SITE GEOLOGY: UPLIFTED FLUVIAL AND FLOODPLAIN DEPOSITS**

ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D. ppm	Hanby result
0		FILL	ASPHALT AGGREGATE BASE		
2.5		ML	SILT WITH SAND; Dark brown, low plasticity, soft, moist; Approximately 75% silt, 5% clay, 20% poorly graded fine sand; No petroleum hydrocarbon odor.		
5		GM	SILTY GRAVEL WITH SAND; Dark brown, loose, moist; Approximately 60% poorly graded fine and medium gravel, 20% poorly graded fine sand, 20% silt; No petroleum hydrocarbon odor.	0	
7.5		ML	SILT; Dark brown, medium plasticity, stiff, moist; Approximatley 50% silt, 40% clay, 10% poorly graded fine sand; No petroleum hydrocarbon odor.		
10		GM	SILTY GRAVEL WITH SAND; Dark gray, loose, wet to saturated; Approximately 60% well graded fine, medium, and coarse gravel, 25% well graded fine, medium, and coarse sand, 15% silt; Strong petroleum hydrocarbon odor.	0	
12.5		ML	SILT; Dark brown, medium to high plasticity, stiff to hard, moist; Approximately 50% silt, 40% clay, 10% poorly graded fine sand; Moderate petroleum hydrocarbon odor.	0	
15		GM	SILTY GRAVEL WITH SAND; Dark gray, loose, wet to saturated; Approximately 60% well graded fine, medium, and coarse gravel, 25% well graded fine, medium, and coarse sand, 15% silt; Strong petroleum hydrocarbon odor.	0	
17.5			HALT AT 16.0 FEET BGS		

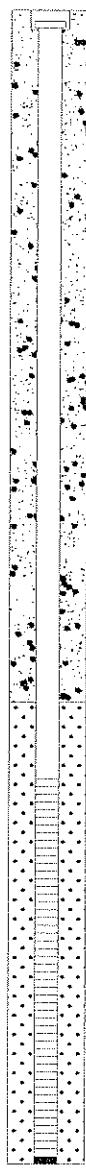
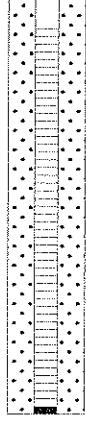
*Hand auger advanced to 4 feet bgs for utility clearance. Soil samples collected at 4.0, 8.0, 12.0, and 16.0 feet bgs. Groundwater grab sample collected.*

Figure \_\_\_\_\_

# MONITORING WELL LOG

Well No.

**MW6**
**PROJECT: BLUE LAKE MARKET**
**BORING LOCATION: 37 FEET SOUTH OF MW4**
**DRILLING METHOD: DIRECT PUSH**
**DRILLER: LACO ASSOCIATES**
**DEPTH TO WATER: INITIAL : 12.0**
**PROJECT NO.: 3888.02**
**DATE: 3/28/06**
**ELEVATION: APPROX. 85 FEET NAVD**
**LOGGED BY:**
**SITE GEOLOGY: UPLIFTED FLUVIAL AND FLOODPLAIN DEPOSITS**
**WELL CASING: 1.5-INCH**
**COMPLETION : N/A**
**SEAL AND INTERVAL: CEMENT, 0'-9' BGS**
**WELL SCREEN AND INTERVAL: 0.010 SLOT, 10'-15' BGS  
SAND PACK AND INTERVAL: #2/16 SAND, 9'-15' BGS**

ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D ppm	Hanby Result	Well Construction Diagram
0		FILL	ASPHALT AGGREGATE BASE			
2.5		GM	SILTY GRAVEL; Dark brown, loose, moist; Approximately 55% poorly graded fine and medium gravel, 10% poorly graded fine sand, 30% silt, 5% clay; No petroleum hydrocarbon odor.			
5		GM	SILTY GRAVEL; Dark brown, loose, moist to wet; Approximately 40% well graded fine, medium, and coarse gravel, 10% poorly graded fine sand, 40% silt, 10% clay; No petroleum hydrocarbon odor.	0		
7.5						
10						
12.5		SP-SM GP-GM SM	POORLY GRADED SAND WITH SILT; Yellow brown, loose, moist; Approximately 90% poorly graded fine sand, 10% silt; No petroleum hydrocarbon odor. POORLY GRADED GRAVEL WITH SILT AND SAND; Dark gray, loose, wet to saturated; Approximately 65% poorly graded fine and medium gravel, 25% poorly graded fine and medium sand, 10% silt; No petroleum hydrocarbon odor.	0		
15		GW-GM	SILTY SAND; Dark gray, loose, saturated; Approximately 85% poorly graded fine and medium sand, 15% silt; Petroleum hydrocarbon odor. WELL GRADED GRAVEL WITH SILT AND SAND; Dark gray, loose, saturated; Approximately 75% well graded fine, medium, and coarse gravel, 15% poorly graded fine and medium sand, 10% silt; Petroleum hydrocarbon odor. HALT AT 15 FEET BGS.	168		
17.5						

*Hand auger advanced to 4 feet bgs for utility clearance. Soil samples collected at 8ft and 15ft bgs.*

Figure \_\_\_\_\_

# **Attachment 3**

**LACO ASSOCIATES**  
ENGINEERS GEOLOGISTS ENVIRONMENTAL CONSULTANTS

21 W. 4th Street  
Eureka, California 95501  
Phone 707-443-5054  
800-515-5054  
Fax 707-443-0553

PROJECT	Well Development	BY JLS	SHEET NO.
LOCATION	Blue Lake	4/3/6	1052
CLIENT	P. Falkins	CHECKED 4/3	JOB NO. 3888 02 1202

10:45 Setting up on Max #6

11:15 Surged with solid block for 5 min, then with check wall for 10 min. surged out 5 gallons of water starting to pump with DHP

12:45 Water coming out clear with a turbidity of 8-10 NTU's. Pumped a total of 50 gallons of water. Well Developed, decreasing & leading to focus site

1:00 6 ft - size

## WELL DEVELOPMENT RECORD

SHEET 2 of 2

Project Name: Blue Lake Market

Well ID: MW# 6

Contractor: Laco

Casing Diameter: 1.5"

Project No.: 3888.02 /202

Date Installed: \_\_\_\_\_

Development Contractor: Leco

## METHOD OF DEVELOPMENT

Swabbing       Bailing       Pumping       Describe \_\_\_\_\_

Equipment decontaminated prior to development  Yes  No

Describe \_\_\_\_\_

#### CASING VOLUME INFORMATION

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

## PURGING INFORMATION

Measured Well Depth (B) 14.36 ft.

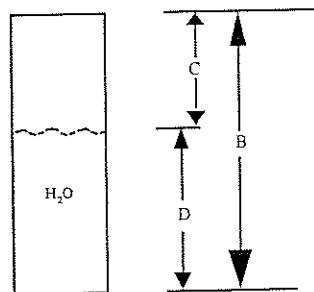
Measured Water Level Depth (C) 7.95 ft.

$$\text{Length of Static Water Column (D)} \frac{14.33}{(B)} - \frac{7.95}{(C)} = 6.47 \text{ ft.}$$

$$\text{Casing Water Volume } \frac{0.09}{(\text{A})} \times \frac{6.37}{(\text{D})} = \underline{0.5733} \text{ gal}$$

Volume of Water Added to Well During Installation = 0 gal

Total Purge Volume = 50 (gal)



Time	Pump Rate	Water Level Depth (ft)	Volume Removed (gal)	pH	Cond (mS/cm)	Temperature F or C	Turbidity (NTU)	Comments
11:15	.5	8.20	5	(	(	(	>100	Silty
11:30	.5	8.19	7.5	(	(	(	>100	Silty
11:45	.5	8.33	4.5	(	(	(	>100	Turbid
12:00	.5	8.21	7.5	)	)	)	>100	Turbid
12:15	.5	8.22	7.5	)	)	)	6.8	Turbid
12:30	.5	8.21	7.5	)	)	)	7.9	slightly Turbid
12:45	.5	8.21	7.5	)	)	)	8.3	Clear

Developer Signature:  Date: 11/30/06

Date: 4/3/06



Project Name: **BLUE LAKE MARKET**  
 Project No.: **3888.02**  
 Date: **4-4-06**  
 Global ID No.: **T0602300170**  
 PM: **CSM**

Tech: **RLD** *[Signature]*  
 Mob/Demob time: **25/25**  
 Travel time: **1.0**  
 Time on site: **11:15**  
 Time off site: **12:45**  
 Mileage: **34**

	<b>MW1</b>	<b>MW2</b>	<b>MW4</b>	<b>MW5</b>	<b>MW6</b>
WELL No.	<b>2.0</b>	<b>2.0</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>
DIAMETER (in)					
SCREENED INTERVAL (ft)	<b>5-15</b>	<b>4-14</b>	<b>10-15</b>	<b>10-15</b>	<b>5-15</b>
DEPTH TO WATER (ft)					<b>8.04</b>
FIELD INTRINSICS	INITIAL	FINAL	INITIAL	FINAL	INITIAL
					FINAL
	pH				
	TEMP (°C)				
	Ecw (μohms)				
	ORP (mV)				
DO (mg/L)					<b>89 94</b>
					<b>4.16 2.16</b>
OTHER (units)					
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING PURGE	TIME				
	METHOD (DHP/CB/B)				
	RATE (Lpm)				
	VOLUME (L)				
	COLOR				
	ODOR				
	INTAKE DEPTH (FEET)				
SAMPLE	TIME				
	METHOD (DHP/CB/B)				
	ANALYTES	<b>TPHg/BTEX/MTBE</b>	<b>TPHg/BTEX/MTBE</b>	<b>TPHg/BTEX/MTBE</b>	<b>TPHg/BTEX/MTBE</b>
	TOTAL DRAWDOWN (FEET)				
	REMARKS				
WELL CONDITION					<b>Good</b>
WASTE DRUMS	<b>4 DOT DRUMS ONSITE 2 - DRAWDOWN 2 - SOIL</b>				

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED



Project Name: **BLUE LAKE MARKET**

Project No.: **3888.02**

Date:

Global ID No.: **T0602300170**

PM: **CSM**

Tech: **RLD** *[Signature]*

Mob/Demob time: **12:55**

Travel time: **1.0**

Time on site: **11:15**

Time off site: **12:45**

Mileage: **34**

WELL No.:	<b>MW3</b>					
DIAMETER (in)	<b>2.0</b>					
SCREENED INTERVAL (ft)	<b>5-15</b>					
DEPTH TO WATER (ft)						
	<b>INITIAL</b>	<b>FINAL</b>				
FIELD INTRINSICS	pH					
	TEMP (°C)					
	E <sub>CW</sub> (μmhos)					
	ORP (mV)					
	DO (mg/L)					
	OTHER (units)					
DEPTH MEASUREMENTS ARE REFERENCED TO TOP OF CASING PURGE	TIME					
	METHOD (DHP/CB/B)					
	RATE (Lpm)					
	VOLUME (L)					
	COLOR					
	ODOR					
	INTAKE DEPTH (FEET)					
SAMPLE	TIME					
	METHOD (DHP/CB/B)					
	ANALYTES	<b>MEASURE ONLY</b>				
	TOTAL DRAWDOWN (FEET)					
	REMARKS					
WELL CONDITION						
WASTE DRUMS						



**LACO ASSOCIATES**

**CONSULTING ENGINEERS**

21 West Fourth Street, Eureka, CA 95501

TEL 707.443.5054

FAX 707.443.0553

Project Name:

*BLUE-WINGED MALLARD*

Project No.: 388842

Tech

24

Date \_\_\_\_\_

4-4-06



# LACO ASSOCIATES

CONSULTING ENGINEERS

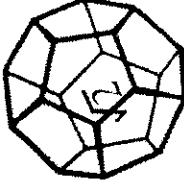
21 West Fourth Street, Eureka, CA 95501  
TEL 707.443.5054  
FAX 707.443.0553

Project Name: BLUE LAKE MARKET  
Project No.: 3888.02

Tech: RUD  
Date: 4-4-06

# NORTH COAST LABORATORIES LTD.

5680 West End Road • Alcatra • CA 95521-9202  
707-422-4649 Fax 707-822-0631



## Chain of Custody

Attention: PAT FOLKINS

Results & Invoice to: \_\_\_\_\_

Address: 2020 ARDAGH COURT  
EUREKA, CA 95503

Phone: \_\_\_\_\_

Copies of Report to: Christine Manhart-LACO  
*[Handwritten Signature]*

Sampler (Sign & Print): RLD *[Handwritten Signature]*

### PROJECT INFORMATION

Project Number: 3888.02

Project Name: BLUE LAKE MARKET

Purchase Order Number: task 3035

b

c

d

e

LABORATORY NUMBER:

TAT:  24 Hr  48 Hr  5 Day  5-7 Day

STD (2-3 Wk)  Other: \_\_\_\_\_

PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS:

State Forms

Preliminary:  FAX  Verbal  By: \_\_\_\_\_

Final Report:  FAX  Verbal  By: \_\_\_\_\_

CONTAINER CODES:

1— $\frac{1}{2}$  gal. pt; 2—250 ml pt;

3—500 ml pt; 4—1 L Nalgene; 5—250 ml BG;

6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA;

10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar;

13—brass tube; 14—other

PRESERVATIVE CODES:

a—HNO<sub>3</sub>; b—HCl; c—H<sub>2</sub>SO<sub>4</sub>;

d—Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>; e—NaOH; f—C<sub>2</sub>H<sub>5</sub>O<sub>2</sub>Cl; g—other

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

GEOTRACKER

a

b

c

d

e

f

g

ANALYSIS      THERMOTEST/MTR

SAMPLE DISPOSAL

NCL Disposal of Non-Contaminated

Return

Pickup

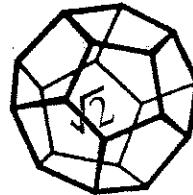
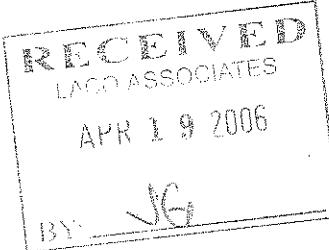
CHAIN OF CUSTODY SEALS Y/N/NA

SHIPPED VIA: UPS  Air-Ex  Fed-Ex  Bus  Hand

\*MATRIX: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

# **Attachment 4**



NORTH COAST  
LABORATORIES LTD.

April 18, 2006

Pvt. cust. paying on pickup

CJW

Order No.: 0603778

Invoice No.: 57651

PO No.: 203

ELAP No. 1247-Expires July 2006

Attn: Pat Folkins

RE: 3888.02 Blue Lake Market

**SAMPLE IDENTIFICATION**

Fraction	Client Sample Description
01A	3888-B15-S4.25
02A	3888-B15-S8.0
03A	3888-B15-S10.5
04A	3888-B15-S13.0
05A	3888-B15-S16.0
06A	3888-B16-S4.0
07A	3888-B16-S8.0
08A	3888-B16-S12.0
09A	3888-B16-S16.0
10A	3888-MW6-S8.0
11A	3888-MW6-S15.0
12A	3888-B15-GW
13A	3888-B16-GW

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

**REPORT CERTIFIED BY**

Colleen Blackstone T. Suen

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.

Laboratory Director

CLIENT: Pvt. cust. paying on pickup  
Project: 3888.02 Blue Lake Market  
Lab Order: 0603778

**CASE NARRATIVE****BTEX - Soil:**

All of the samples were extracted within the 14 day holding time. Due to problems with the analytical instrument, the sample extracts were analyzed 5 days past the holding time. The recoveries for the laboratory control sample/laboratory control sample duplicate (LCS/LCSD) that were extracted with the samples were within the acceptance limits; therefore, the data were accepted.

Some reporting limits were raised for samples 3888-B15-S10.5, 3888-B15-S13.0, 3888-B16-S12.0 and 3888-B16-S16.0 due to matrix interference.

Sample 3888-MW6-S15.0 was diluted and some reporting limits were raised additionally due to matrix interference.

**TPH as Gasoline - Soil:**

All of the samples were extracted within the 14 day holding time. Due to problems with the analytical instrument, the sample extracts were analyzed 5 days past the holding time. The recoveries for the LCS/LCSD that were extracted with the samples were within the acceptance limits; therefore, the data were accepted.

Samples 3888-B15-S10.5 and 3888-MW6-S15.0 do not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.

The gasoline value for sample 3888-B16-S12.0 includes the reported gasoline components and additives in addition to other peaks in the gasoline range.

The gasoline values for samples 3888-B15-S13.0 and 3888-B16-S16.0 include the reported gasoline components in addition to other peaks in the gasoline range.

**BTEX - Water:**

Some reporting limits were raised for sample 3888-B16-GW due to matrix interference.

Sample 3888-B16-GW was diluted and the reporting limit for toluene was raised additionally due to matrix interference.

The LCSD recoveries were below the lower acceptance limits for most analytes. The response of the reporting limit standard was such that the analytes would have been detected even with the low recoveries; therefore, the data were accepted.

The relative percent difference (RPD) for the laboratory control samples was above the acceptance limit for MTBE. This indicates that the results could be variable. Since there were no detectable levels of

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**CLIENT:** Pvt. cust. paying on pickup  
**Project:** 3888.02 Blue Lake Market  
**Lab Order:** 0603778

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## CASE NARRATIVE

the analyte in the samples, the data were accepted.

### TPH as Gasoline - Water:

Sample 3888-B16-GW does not present a peak pattern consistent with that of gasoline. The reported result represents the amount of material in the gasoline range.

The LCS/LCSD recoveries were below the lower acceptance limit for gasoline. The response of the reporting limit standard was such that the analyte would have been detected even with the low recoveries; therefore, the data were accepted.

Date: 18-Apr-06  
WorkOrder: 0603778

## ANALYTICAL REPORT

Client Sample ID: 3888-B15-S4.25  
Lab ID: 0603778-01A

Received: 3/30/06

Collected: 3/28/06 0:00

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Toluene	0.0056	0.0050	µg/g	1.0	4/11/06	4/16/06
Ethylbenzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
m,p-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
o-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	92.1	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	4/11/06	4/16/06

Client Sample ID: 3888-B15-S8.0

Received: 3/30/06

Collected: 3/28/06 0:00

Lab ID: 0603778-02A

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Toluene	0.0054	0.0050	µg/g	1.0	4/11/06	4/16/06
Ethylbenzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
m,p-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
o-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	92.5	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	4/11/06	4/16/06

Date: 18-Apr-06  
WorkOrder: 0603778

## ANALYTICAL REPORT

Client Sample ID: 3888-B15-S10.5  
Lab ID: 0603778-03A

Received: 3/30/06

Collected: 3/28/06 0:00

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Toluene	ND	0.040	µg/g	1.0	4/11/06	4/16/06
Ethylbenzene	ND	0.040	µg/g	1.0	4/11/06	4/16/06
m,p-Xylene	ND	0.040	µg/g	1.0	4/11/06	4/16/06
o-Xylene	ND	0.030	µg/g	1.0	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	93.6	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	4.6	1.0	µg/g	1.0	4/11/06	4/16/06

Client Sample ID: 3888-B15-S13.0

Received: 3/30/06

Collected: 3/28/06 0:00

Lab ID: 0603778-04A

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Toluene	ND	0.010	µg/g	1.0	4/11/06	4/16/06
Ethylbenzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
m,p-Xylene	0.0069	0.0050	µg/g	1.0	4/11/06	4/16/06
o-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	96.8	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1.3	1.0	µg/g	1.0	4/11/06	4/16/06

Date: 18-Apr-06  
WorkOrder: 0603778

## ANALYTICAL REPORT

Client Sample ID: 3888-B15-S16.0  
Lab ID: 0603778-05A

Received: 3/30/06

Collected: 3/28/06 0:00

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Toluene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Ethylbenzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
m,p-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
o-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	92.3	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	4/11/06	4/16/06

Client Sample ID: 3888-B16-S4.0

Received: 3/30/06

Collected: 3/28/06 0:00

Lab ID: 0603778-06A

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Toluene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Ethylbenzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
m,p-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
o-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	92.5	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	4/11/06	4/16/06

Date: 18-Apr-06  
WorkOrder: 0603778

## ANALYTICAL REPORT

Client Sample ID: 3888-B16-S8.0  
Lab ID: 0603778-07A

Received: 3/30/06

Collected: 3/28/06 0:00

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Toluene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Ethylbenzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
m,p-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
o-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	87.7	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	4/11/06	4/16/06

Client Sample ID: 3888-B16-S12.0

Received: 3/30/06

Collected: 3/28/06 0:00

Lab ID: 0603778-08A

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	0.051	0.010	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.030	µg/g	1.0	4/11/06	4/16/06
Toluene	ND	0.20	µg/g	1.0	4/11/06	4/16/06
Ethylbenzene	0.049	0.0050	µg/g	1.0	4/11/06	4/16/06
m,p-Xylene	0.11	0.0050	µg/g	1.0	4/11/06	4/16/06
o-Xylene	0.028	0.0050	µg/g	1.0	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	120	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	15	1.0	µg/g	1.0	4/11/06	4/16/06

Date: 18-Apr-06  
WorkOrder: 0603778

## ANALYTICAL REPORT

Client Sample ID: 3888-B16-S16.0  
Lab ID: 0603778-09A

Received: 3/30/06

Collected: 3/28/06 0:00

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Toluene	ND	0.040	µg/g	1.0	4/11/06	4/16/06
Ethylbenzene	0.0056	0.0050	µg/g	1.0	4/11/06	4/16/06
m,p-Xylene	0.014	0.0050	µg/g	1.0	4/11/06	4/16/06
o-Xylene	ND	0.010	µg/g	1.0	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	94.3	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1.3	1.0	µg/g	1.0	4/11/06	4/16/06

Client Sample ID: 3888-MW6-S8.0

Received: 3/30/06

Collected: 3/28/06 0:00

Lab ID: 0603778-10A

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Toluene	0.0071	0.0050	µg/g	1.0	4/11/06	4/16/06
Ethylbenzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
m,p-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
o-Xylene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	94.5	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	4/11/06	4/16/06

Date: 18-Apr-06  
WorkOrder: 0603778

## ANALYTICAL REPORT

Client Sample ID: 3888-MW6-S15.0  
Lab ID: 0603778-11A

Received: 3/30/06

Collected: 3/28/06 0:00

Test Name: BTEX

Reference: EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	4/11/06	4/16/06
Benzene	ND	0.0050	µg/g	1.0	4/11/06	4/16/06
Toluene	ND	1.0	µg/g	10	4/11/06	4/16/06
Ethylbenzene	ND	0.30	µg/g	10	4/11/06	4/16/06
m,p-Xylene	ND	0.40	µg/g	10	4/11/06	4/16/06
o-Xylene	ND	0.60	µg/g	10	4/11/06	4/16/06
Surrogate: Cis-1,2-Dichloroethylene	97.6	71.8-135	% Rec	1.0	4/11/06	4/16/06

Test Name: TPH as Gasoline

Reference: EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	54	10	µg/g	10	4/11/06	4/16/06

Client Sample ID: 3888-B15-GW

Received: 3/30/06

Collected: 3/28/06 0:00

Lab ID: 0603778-12A

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		4/8/06
Benzene	ND	0.50	µg/L	1.0		4/8/06
Toluene	ND	0.50	µg/L	1.0		4/8/06
Ethylbenzene	ND	0.50	µg/L	1.0		4/8/06
m,p-Xylene	ND	0.50	µg/L	1.0		4/8/06
o-Xylene	ND	0.50	µg/L	1.0		4/8/06
Surrogate: Cis-1,2-Dichloroethylene	90.2	85-115	% Rec	1.0		4/8/06

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		4/8/06

Date: 18-Apr-06  
WorkOrder: 0603778

## ANALYTICAL REPORT

Client Sample ID: 3888-B16-GW  
Lab ID: 0603778-13A

Received: 3/30/06

Collected: 3/28/06 0:00

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	10	µg/L	1.0		4/8/06
Benzene	ND	5.0	µg/L	1.0		4/8/06
Toluene	ND	40	µg/L	20		4/8/06
Ethylbenzene	ND	10	µg/L	1.0		4/8/06
m,p-Xylene	ND	6.0	µg/L	1.0		4/8/06
o-Xylene	ND	4.0	µg/L	1.0		4/8/06
Surrogate: Cis-1,2-Dichloroethylene	114	85-115	% Rec	1.0		4/8/06

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	1,900	1,000	µg/L	20		4/8/06

## North Coast Laboratories, Ltd.

Date: 18-Apr-06

**CLIENT:** Pvt. cust. paying on pickup  
**Work Order:** 0603778  
**Project:** 3888.02 Blue Lake Market

**QC SUMMARY REPORT**

Method Blank

Sample ID	Batch ID	Test Code:	Units:	Analysis Date	Prep Date					
Client ID:		Run ID:	SPK value	SeqNo:						
Analyte	Result	Limit	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	ND	0.050								
Benzene	ND	0.0050								
Toluene	ND	0.0050								
Ethylbenzene	ND	0.0050								
m,p-Xylene	ND	0.0050								
o-Xylene	ND	0.0050								
Cis-1,2-Dichloroethylene	0.923	0.10	1.00	0	92.3%	72	135	0		
Sample ID	Batch ID	Test Code:	Units:	Analysis Date	Prep Date					
Client ID:		Run ID:	SPK value	SeqNo:						
Analyte	Result	Limit	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	ND	3.0								
Benzene	ND	0.50								
Toluene	0.1530	0.50								J
Ethylbenzene	0.1003	0.50								J
m,p-Xylene	0.2549	0.50								J
o-Xylene	0.09677	0.50								J
Cis-1,2-Dichloroethylene	0.938	0.10	1.00	0	93.8%	85	115	0		
Sample ID	Batch ID	Test Code:	Units:	Analysis Date	Prep Date					
Client ID:		Run ID:	SPK value	SeqNo:						
Analyte	Result	Limit	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH/C Gas (C6-C14)	0.2932	1.0								J

**Qualifiers:**  
 ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

# QC SUMMARY REPORT

Method Blank

CLIENT: Pvt. cust. paying on pickup  
Work Order: 0603778  
Project: 3888.02 Blue Lake Market

Sample ID	MB-47/06	Batch ID:	R40704	Test Code:	TPHCGW	Units:	µg/L	Analysis Date	4/7/06 6:42:09 PM	Prep Date				
Client ID:				Run ID:	ORGCS_060407A			SeqNo:	584751					
Analyte				Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPD Limit	Qual
TPHC Gas (C6-C14)			ND	50										

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
I - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank

## North Coast Laboratories, Ltd.

Date: 18-Apr-06

**QC SUMMARY REPORT**  
Laboratory Control Spike

CLIENT: Pvt. cust. paying on pickup

Work Order: 0601778

Project: 3888.02 Blue Lake Market

Sample ID	LCS-15502	Batch ID:	15502	Test Code:	BTXES	Units:	µg/g			Analysis Date	4/16/06 12:02:19 AM	Prep Date	4/11/06	
Client ID:				Run ID:	ORGC8_060415C <th></th> <th></th> <th></th> <th></th> <th>SeqNo:</th> <td>586371</td> <th></th> <th></th>					SeqNo:	586371			
Analyte				Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE			0.3325	0.050	0.400	0	83.1%	75	124	124	0	0		
Benzene			0.04790	0.0050	0.0500	0	95.8%	80	128	128	0	0		
Toluene			0.05047	0.0050	0.0500	0	101%	85	126	126	0	0		
Ethylbenzene			0.04937	0.0050	0.0500	0	98.7%	80	126	126	0	0		
m,p-Xylene			0.04945	0.0050	0.100	0	94.9%	84	130	130	0	0		
o-Xylene			0.04712	0.0050	0.0500	0	94.2%	84	125	125	0	0		
Cis-1,2-Dichloroethylene			1.04	0.10	1.00	0	104%	72	135	135	0	0		
Sample ID	LCSD-15502	Batch ID:	15502	Test Code:	BTXES	Units:	µg/g			Analysis Date	4/16/06 12:36:22 AM	Prep Date	4/11/06	
Client ID:				Run ID:	ORGC8_060415C <th></th> <th></th> <th></th> <th></th> <th>SeqNo:</th> <td>586372</td> <th></th> <th></th>					SeqNo:	586372			
Analyte				Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE			0.3282	0.050	0.400	0	82.0%	75	124	0.332	1.30%	15		
Benzene			0.04803	0.0050	0.0500	0	96.1%	80	128	0.0479	0.271%	15		
Toluene			0.04983	0.0050	0.0500	0	99.7%	85	126	0.0505	1.27%	15		
Ethylbenzene			0.04937	0.0050	0.0500	0	98.7%	80	126	0.0494	0.00284%	15		
m,p-Xylene			0.09362	0.0050	0.100	0	93.6%	84	130	0.0950	1.41%	15		
o-Xylene			0.04668	0.0050	0.0500	0	93.4%	84	125	0.0471	0.925%	15		
Cis-1,2-Dichloroethylene			1.04	0.10	1.00	0	105%	72	135	1.04	0.167%	15		

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

**QC SUMMARY REPORT**  
Laboratory Control Spike

**CLIENT:** Pvt. cust. paying on pickup  
**Work Order:** 0603778  
**Project:** 3888.02 Blue Lake Market

Sample ID	LCS-06213	Batch ID:	R40722	Test Code:	BTXEW	Units:	µg/L	Analysis Date 4/7/06 3:47:18 PM			Prep Date		
Client ID:				Run ID:	ORGCS_060407B	% Rec		LowLimit	HighLimit	RPD Ref Val	% RPD	RPDLimit	Qual
Analyte				Result	Limit	SPK value	SPK Ref Val						
MTBE			43.14	3.0	40.0	0	108%	85	115	0	0		
Benzene			4.553	0.50	5.00	0	91.1%	85	115	0	0		
Toluene			4.680	0.50	5.00	0	93.6%	85	115	0	0		
Ethylbenzene			4.449	0.50	5.00	0	89.0%	85	115	0	0		
m,p-Xylene			8.938	0.50	10.0	0	89.4%	85	115	0	0		
o-Xylene			4.546	0.50	5.00	0	90.9%	85	115	0	0		
Cis-1,2-Dichloroethylene			1.12	0.10	1.00	0	112%	85	115	0	0		

Sample ID	LCSD-06213	Batch ID:	R40722	Test Code:	BTXEW	Units:	µg/L	Analysis Date 4/7/06 11:53:43 PM			Prep Date		
Client ID:				Run ID:	ORGCS_060407B	% Rec		LowLimit	HighLimit	RPD Ref Val	% RPD	RPDLimit	Qual
Analyte				Result	Limit	SPK value	SPK Ref Val						
MTBE			35.23	3.0	40.0	0	88.1%	85	115	43.1	20.2%	15	R
Benzene			4.207	0.50	5.00	0	84.1%	85	115	4.55	7.91%	15	S
Toluene			4.121	0.50	5.00	0	82.4%	85	115	4.68	12.7%	15	S
Ethylbenzene			3.991	0.50	5.00	0	79.8%	85	115	4.45	10.9%	15	S
m,p-Xylene			7.824	0.50	10.0	0	78.2%	85	115	8.94	13.3%	15	S
o-Xylene			4.009	0.50	5.00	0	80.2%	85	115	4.55	12.5%	15	S
Cis-1,2-Dichloroethylene			1.06	0.10	1.00	0	108%	85	115	1.12	4.94%	15	

Sample ID	LCS-15502-G	Batch ID:	15502	Test Code:	TPHCGS	Units:	µg/g	Analysis Date 4/16/06 1:10:26 AM			Prep Date 4/11/06		
Client ID:				Run ID:	ORGCS_060415B	% Rec		LowLimit	HighLimit	RPD Ref Val	% RPD	RPDLimit	Qual
Analyte				Result	Limit	SPK value	SPK Ref Val						
TPHC Gas (C6-C14)			11.25	1.0	10.0	0	112%	102	128	0	0		

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

**Notes:** S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

**Comments:** B - Analyte detected in the associated Method Blank

**CLIENT:** Pvt. cust. paying on pickup  
**Work Order:** 0603778  
**Project:** 3888.02 Blue Lake Market

**QC SUMMARY REPORT**  
Laboratory Control Spike Duplicate

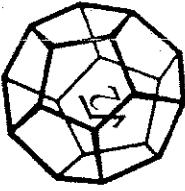
Sample ID	Batch ID:	Test Code:	Units:	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID LCSD-15502-G	Batch ID: 15502	TPHCGS	µg/g							
Client ID:	Run ID:	ORGC8_060415B								
Analyte	Result	Limit	SPK value	SPK Ref Val						
TPHC Gas (C6-C14)	11.38	1.0	10.0	0	114%	102	128	11.2	1.16%	15
Sample ID	Batch ID:	Test Code:	Units:	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID LCS-06214	R40704	TPHCGW	µg/L							
Client ID:	Run ID:	ORGС8_060407A								
Analyte	Result	Limit	SPK value	SPK Ref Val						
TPHC Gas (C6-C14)	396.7	50	500	0	79.3%	85	115	0	S	
Sample ID	Batch ID:	Test Code:	Units:	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID LCSD-06214	R40704	TPHCGW	µg/L							
Client ID:	Run ID:	ORGС8_060407A								
Analyte	Result	Limit	SPK value	SPK Ref Val						
TPHC Gas (C6-C14)	402.8	50	500	0	80.6%	85	115	397	1.52%	15

**Qualifiers:**  
ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



**NORTH COAST  
LABORATORIES LTD.**

6680 West End Road • Arcata • CA 95521-9202  
707-822-4649 Fax 707-822-6831

## Chain of Custody

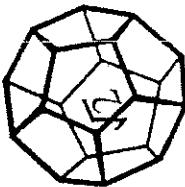
Attention: \_\_\_\_\_  
Results & Invoice to: Pet Falkins  
Address: 2020 Arden Ct  
Eureka, CA 95503  
Phone: \_\_\_\_\_  
Copies of Report to: LACO Associates - Christopher  
Sampler (Sign & Print): Todd B. Becker

**MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

**ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT**

## Chain of Custody

**NORTH COAST  
LABORATORIES LTD.**



80 West End Road • Arcata • CA 95521-9202  
707-822-4649 Fax 707-822-6831

Attention: <u>Pat Tollkins</u>	Results & Invoice to: <u>2020 Ardagh Ct.</u>	Copies of Report to: <u>LACO - Chris Watt</u>	Sampler (Sign & Print): <u>Amber T. B. Becker</u>
Address: <u>Eureka, CA 95503</u>	Phone: _____	_____	_____
<b>PROJECT INFORMATION</b>			
Project Number: <u>3888.02</u>		Project Name: <u>Blue Lake Market</u>	

<b>SAMPLE DISPOSAL</b>	<input checked="" type="checkbox"/> NCL Disposal of Non-Contaminated		
	<input type="checkbox"/> Return	<input type="checkbox"/> Pickup	<input type="checkbox"/>
<b>CHAIN OF CUSTODY SEALS Y/N/NA</b> <input type="checkbox"/>			
<b>SHIPPED VIA:</b> UPS Air-Ex Fed-Ex Bus Hand			

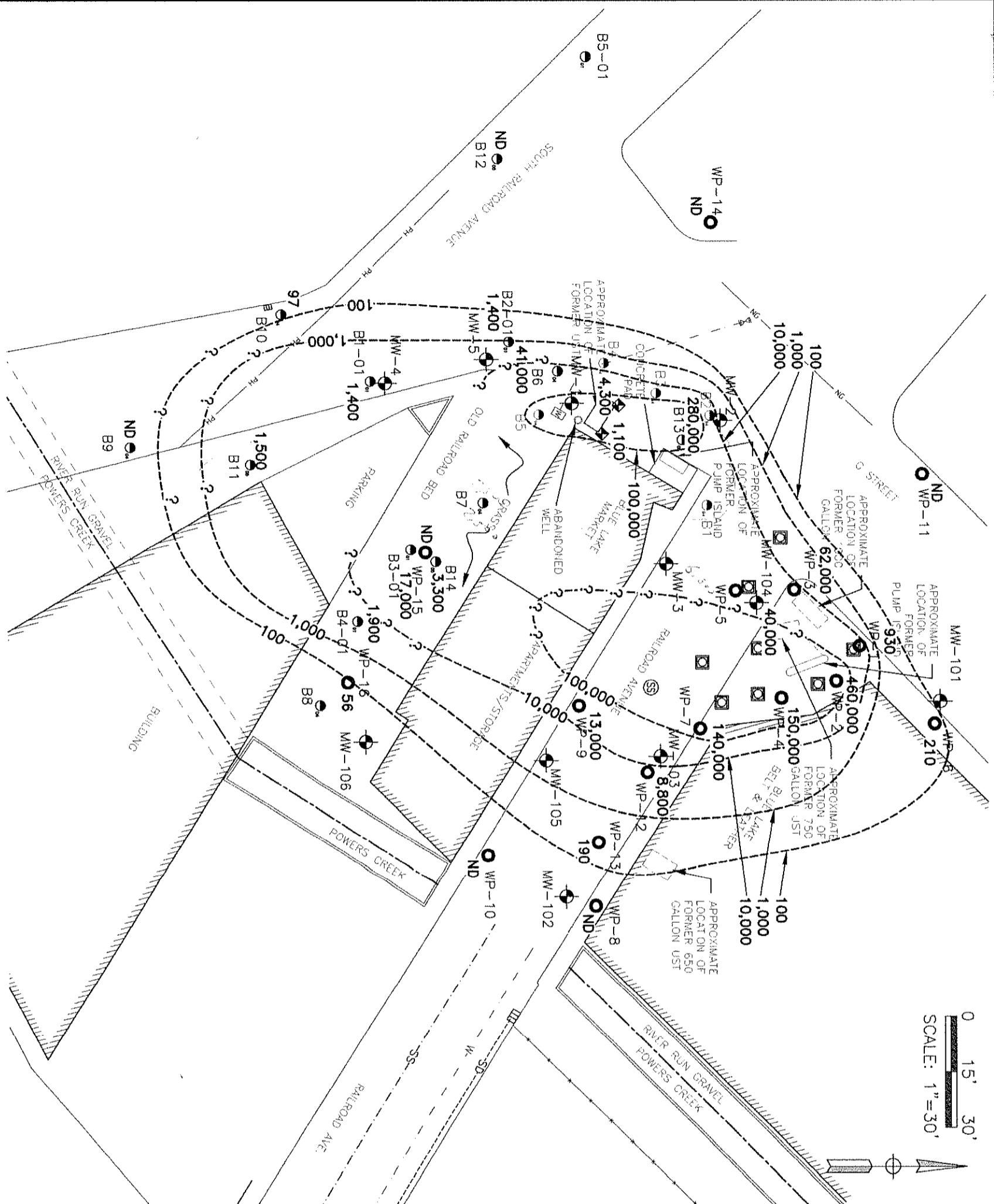
**\*MATRIX:** DW=Drinking Water; Fff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUFOUS SAMPLES WILL BE RETURNED TO CLIENT

# **Attachment 5**



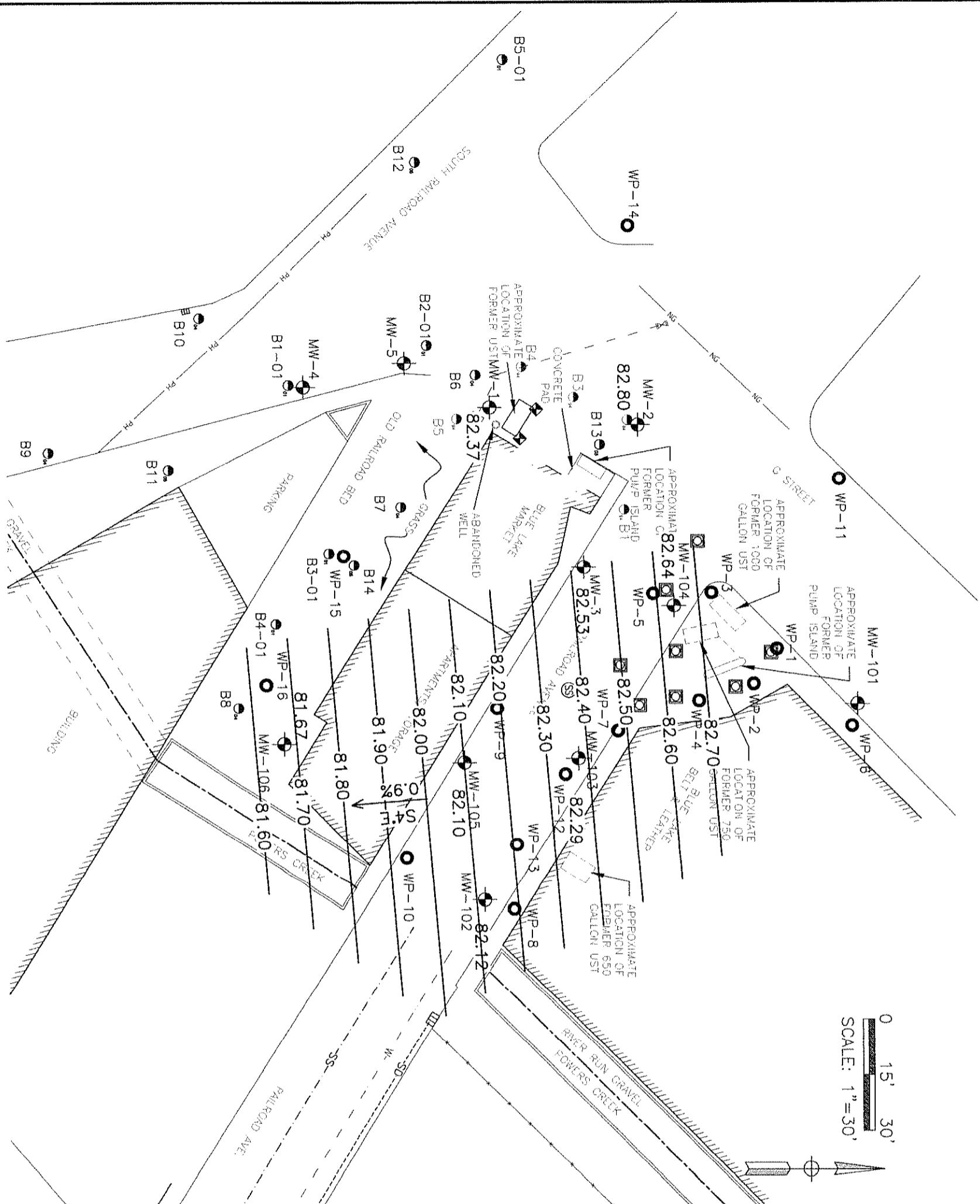
# **Attachment 6**



NO.	REVISION	BY	CHK	DATE

REPORT OF FINDINGS/ BORING INSTALLATION		SCALE 1" = 30' DRAWN CHECK TDN
CURRENT & HISTORIC TPHg IN GROUNDWATER ISOCONCENTRATION MAP		APPROVED
PAT FOLKINS BLUE LAKE MARKET, RAILROAD AVE, BLUE LAKE, CA		DATE 11/18/05 JOB NO. 3888.02 FIGURE 6

# **Attachment 7**



## LEGEND

Legend:

- MW-106**: SHN MONITORING WELL
- MW-102**: WELL POINT (SHN 1998)
- MW-104**: BORING (LACO 1994)
- BORING**: BORING (LACO 2001)
- BORING**: BORING (LACO 2004)
- BORING**: BORING (LACO 2005)
- ◆**: SOIL SAMPLE LOCATIONS
- : SHN OZONE SPARGE WELL

GRADIENT BASED ON  
THREE-POINT CALCULATION  
USING MW102, MW104, & MW106

HYDRAULIC GRADIENT

82.2

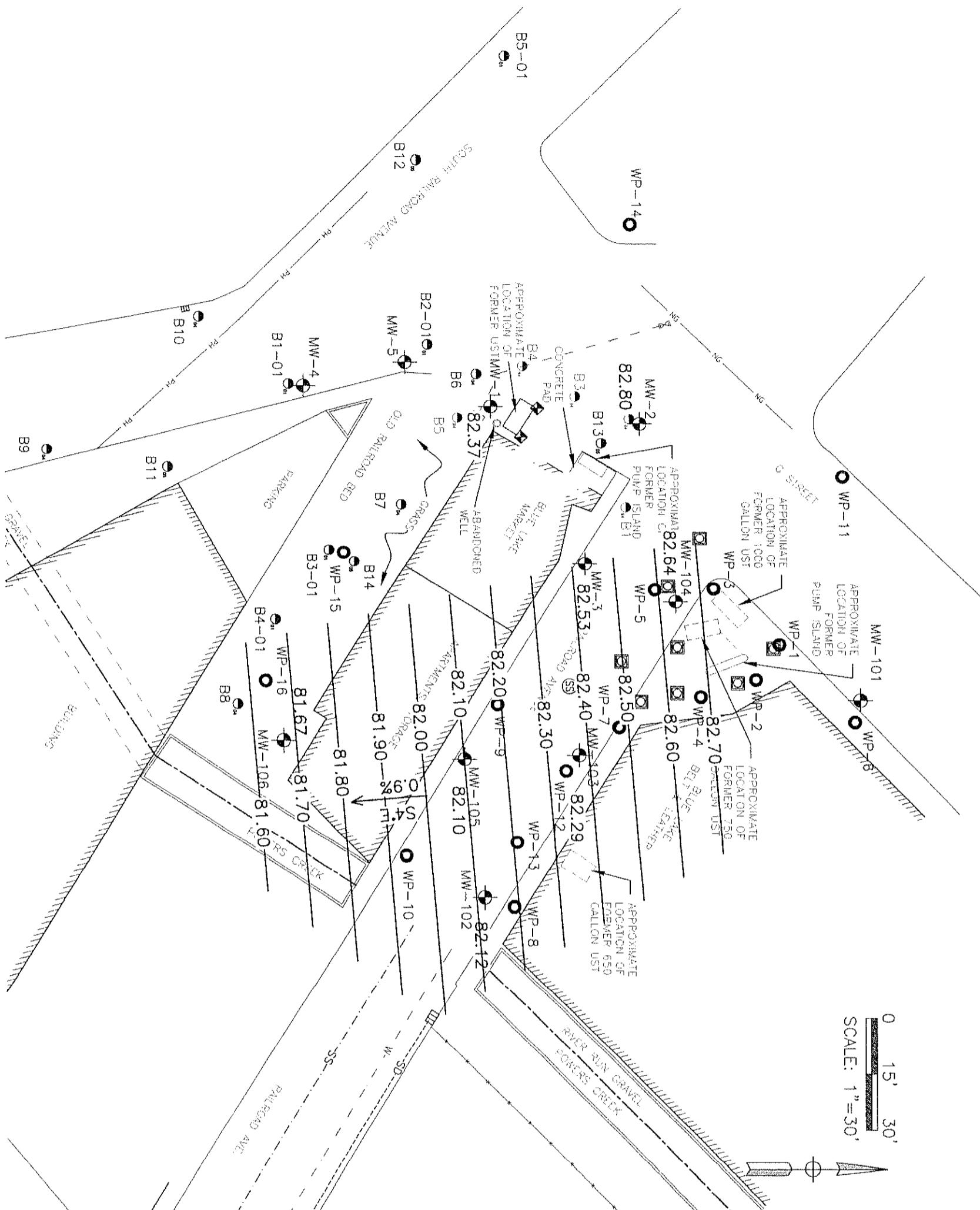
EQUIPOTENTIAL LINES  
(Feet, NAVD 88)

0.9%

S4.6E

NORTH

<b>REPORT OF FINDINGS/ BORING INSTALLATION</b>	
REVISED HYDRAULIC GRADIENT MAP (9/01/05)	
<b>PAT FOLKINS</b> BLUE LAKE MARKET RAILROAD AVE, BLUE LAKE, CA	SCALE 1" = 30' DRAWN BY J.D. CHECKED BY J.D. APPROVED BY J.D. DATE 11/11/05 JOB NO. 3888.01 FIGURE 1C



REPORT OF FINDINGS/  
BORING INSTALLATION  
REVISED HYDRAULIC GRADIENT MAP (9/01/05)

LEGEND

EQUIPOTENTIAL LINES  
(Feet, NAVD 88)

HYDRAULIC GRADIENT  
0.9% E  
0.4% S  
0.0%

GRADIENT BASED ON  
THREE-POINT CALCULATION  
USING MW1C2, MW104, & MW106

NO.	REVISION	BY	CHK	DATE

PAT FOLKINS	BLUE LAKE MARKET RAILROAD AVE, BLUE LAKE, CA
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FIGURE	10
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LACO ASSOCIATES  
CONSULTING ENGINEERS  
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	PAT FOLKINS	DATE	9/23/05	3
LOCATION	BLUE LAKE MARKET	CHECK		JOB NO.
	HYDRAULIC GRADIENT MAP (9/01/05)	SCALE	1"=40'	3888.01



0' 20' 40'  
SCALE: 1"=40'

